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MONTHLY MEDICAL NEWS
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MONTHLY

MEDICAL NEWS.

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VOLUME II.

LOUISVILLE, KY.
HANNA & CO., PRINTERS.
1860.

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MONTHLY MEDICAL NEWS.

VO. II. LOUISVILLE, KY., JANUARY, 1860. NO. 1.

REPORT OF THE COMMITTEE ON VITAL STATISTICS.

In the discharge of the duty devolved upon the Committee on Vital Statistics, it has seemed well to take a slight glance at some points of comparison between the condition of the inhabitants of Kentucky and that of some other sections of the Union; and also to notice some considerations which are likely to throw impediments in the way of correct information as to the facts introduced, and to suggest a caution as to the inferences to be drawn from those facts, even when there is no doubt as to their correctness.

It is universally allowed that more male than female children are born, the world over; yet, upon examining the census of the United States for 1840, it will be seen that in many of the older States—of the actual population—a majority are females. This is true of New Hampshire, Massachusetts, Rhode Island, Connecticut, Delaware, Maryland, and North Carolina. And although the States of New York, Pennsylvania, and Virginia, have each an excess of males, yet the southern district of New York, and the eastern of Pennsylvania and Virginia, each, had an excess of females. An excess of females over males is found generally in counties which have been long settled. Connected with this consideration, the number of males and females returned as living in a number of States in 1840 and in 1850, has been looked into, and a table formed, so as to show, at a glance, the proportion of the sexes of the white population at these two periods.

It may be well to remark that, as the census returns for 1850 have not come to hand, memoranda made from abstracts of several States, published in the National Intelligencer during the winter 1851–'2, afford my means of comparison.

TABLE A.

Showing the Relative Proportion of the Free White Males and Females in several States, as shown by the Census Returns for 1840 *and* 1850.

STATE.	CENSUS OF 1840.				CENSUS OF 1850.			
	White Males.	White Females.	Excess Males.	Excess Females.	White Males.	White Females.	Excess Males.	Excess Females.
Georgia.	210,534	197,161	13,373	.....	266,096	255,342	10,750	.....
Rhode Island..	51,364	54,225	....	2,821	70,417	73,583	....	3,166
Massachusetts.	360,679	368,351	....	7,672	484,286	501,420	....	16,234
Kentucky.....	305,322	284,930	20,392	.....	392,840	368,848	23,992	.....
Michigan	113,395	98;165	15,230	.....	208,471	186,620	21,851	.....
Arkansas.....	42,211	34,963	7,258	.....	85,699	76,369	9,330	.....
Iowa..	24,256	18,668	5,588	.....	100,885	90,994	9,890	.....
North Carolina	240,047	244,823	....	4,776	272,369	280,095	....	7,726
Illinois..	255,235	217,019	38,206	.....	445,644	400,460	45,184	.....
Pennsylvania..	844,770	831,345	13,425	.....	1,142,863	1,115,600	27,263	.....
Virginia.....	371,223	369,745	1,478	.....	451,552	443,752	7,800	.....
Ohio.....	775,360	726,760	48,600	.....	1,004,111	951,997	52,114	.....
Indiana.....	352,773	325,925	26,848	.....	506,400	471,205	34,195	.....
Louisiana.....	89,747	68,710	21,037	.....	141,059	114,357	26,702	.....
Wisconsin	18,757	11,992	6,765	.....	164,221	140,344	23,877	.....
New York.....	1,207,357	1,171,533	35,824	.....	1,545,052	1,504,405	40,647	.....

By looking over this table, we shall observe that most of the States have a marked excess of male population—some of them an astonishing excess. Upon more close examination, we shall see that this excess is almost every where diminishing. New York, with an increase of nearly 1,000,000 in population, has increased her excess of males less than 5,000. In some States the proportion remains nearly stationary, whilst in others the male excess has increased. In Rhode Island the female excess has diminished. In Pennsylvania the male excess has slightly increased. In Virginia the same is true.

On the other hand, of those three States which in 1840 had an excess of females, in Massachusetts the excess has increased astonishingly, until it is very nearly equal to that of Great Britain, to-wit, 50.87 per cent. females, whilst the latter has 50.92 per cent. females. In Rhode Island the females from being 51.36 per cent. in 1840, have come down to 51.1 per cent., still considerably in advance of England. North Carolina has her proportion of females increased from 50.47 to 50.70 per cent.

We may examine the census in another point of view, and find that there is considerable difference in the proportion of persons of the same age in different States. We will take, for comparison, those living between the ages of 15 and 20 years, those between 70 and 80 years, and those over 100 years. We will take some of the Old Thirteen, some of the secondary formation, and some of the new States. White males alone enter into this computation.

The following table exhibits the proportions of the ages mentioned in the States enumerated as given by the census of 1840:

TABLE B.

OF THE WHOLE WHITE MALE POPULATION THERE IS ONE FOR EVERY

STATES.	From 15 to 20.	From 70 to 80.	Over 100 years.
Massachusetts	9.73	55.72	21.217.60
New Hampshire	8.24	40.32	69.502.00
Rhode Island	9.08	59.58	None.
Connecticut	8.87	43.95	18.537.50
North Carolina	9.67	84.78	8.277.50
South Carolina	9.51	92.00	5.977.00
Georgia	10.07	128.29	11.080.74
Kentucky	9.36	98.74	9.849.13
Tennessee	9.54	107.08	13.017.36
Arkansas	10.93	260.56	14.070.33
Iowa	11.13	346.00	None.
Wisconsin	13.95	341.00	18.759

This table is read thus: In Massachusetts, for every 9.73 of the whole white male population, one is between 15 and 20 years; for every 55.72, one is between 70 and 80 years; and for every 21.217.6, one is over 100 years. From neither Rhode Island nor Iowa was any one over 100 returned.

From this table it appears that the proportion between 15 and 20 years is tolerably uniform until we come to the new States, when it is large.

In the old States, especially in those of the North, there is a large proportion of old persons, whilst of centenarians, South Carolina, North Carolina, Kentucky, and Georgia take precedence, the old Northern States falling far behind.

It is remarkable that what are called free States give a very small quota of centenarians, as compared with the slave States. Thus, New York, with her 2,428,921 inhabitants, gave but 148 centenarians, whilst Kentucky, with 779,828, gave 137; and

Virginia, less populous than either Ohio or Pennsylvania, gave more than both. This remark has reference to the whole population, white and black.

But in looking over the centenarians of the South, we shall be struck with the very large number of blacks, both bond and free. Thus, of 244 in Maryland, 220 are blacks; and of 333 in Virginia, 267 are blacks.

The census affords no means of comparison between the white and black at different periods of life, except of those under 10 years old, and those over 100. Among the colored population, from one-fourth to something over one-third are below 10 years. This is true of both the bond and the free, and indeed of the white also. It is true that in some of the new States the proportion is still larger. We should expect that in after life the proportion of the free colored persons would increase, and that this increase would be more marked in the free States. Upon this point, however, there is no great uniformity. We have formed a table to show the relative condition of the colored population in three of the principal free States, and in four of the slave States, in the latter giving the proportions of both bond and free.

TABLE C.

Exhibiting the proportion of the Male Colored population of certain States between the ages of 36 *and* 55 *years, and also of those over* 100 *years, the Free and Slaves being kept distinct.*

OF THE WHOLE COLORED MALE POPULATION THERE IS ONE FOR EVERY

STATES.	FREE COLORED.		SLAVES.	
	From 36 to 55.	Over 100	From 36 to 55.	Over 100
New York	5 64	1.035	.....	.....
Pennsylvania	6.32	673.43	.....	.....
Ohio	7.44	460.	.....	.....
North Carolina	9.	623.55	8.79	1715.5
South Carolina	9.54	321.17	7.64	1265.42
Missouri	5.73	883.	12.47	1690.70
Kentucky	5.	376.10	10.09	2275.10

From the above table, it appears that in the free States there is one between the ages of 36 and 55 years for every 6.46 of the free colored population, whilst in the slave States there is one for every 7.32. On the other hand, there is one over 100

years in every 551 in the slave States, and but one in every 703 in the free States. Of the slaves the proportion is much larger at both periods in the old States than in the new.

By a slight examination of the preceding tables, it will readily be seen that much caution will be necessary in applying conclusions drawn from facts in one State to a population differently constituted. So far as the sexes are concerned, the facts from Massachusetts, where there is a female excess of 16,234, would badly apply to Illinois, where, with a somewhat smaller population, there is a male excess of 45,184. Or, how can we reason from the population of South Carolina, which has one centenarian for every 5,977 of her white male population, and one for every 2,193 of her whole population, to that of New Hampshire, where the population is one to every 69,302 of the white males, and the proportion of the whole population is one to 23,714.5? Neither can we reason from a population all, or nearly all, white, to one composed more or less largely of slaves. It follows, therefore, that each State has the problem of vital statistics to solve for herself; and it may be truly said, "It is high time she was about it."

Having taken this comparative view, let us now confine ourselves to investigating the condition of our own State. And first let us look at an unfortunate, and therefore an interesting class of our population—the blind, the deaf and dumb, and the idiotic. Below is a table exhibiting the number of each of these classes, as reported from each county in the State. For the better understanding of the subject, we add the numbers of free population, as given by the census of 1850.

Supposing that something of interest may grow out of an investigation of any discoverable relation between the facilities for drinking spirituous liquors, and disease or crime, we have given the numbers of licensed taverns and coffee houses (as also of licensed ten-pin alleys), and of criminal prosecutions and presentments in each county in the State, remarking that, although the privilege to sell spirits was originally an appendage to a tavern, of late years, selling liquor has become, in many instances, the inducement to procure a tavern license—that, in fact, no tavern, no house of entertainment for travelers, is intended to be kept. In this table is also inserted the number of children between the ages of 5 and 16 years, the ages allowed to enter our common schools.

TABLE D.

Showing, at one view, the Free Population, the number of Free Persons blind, of Free Persons deaf and dumb, of Idiots, the number of Children between 5 and 16 years of age, the number of Licensed Taverns, of Coffee Houses, of Ten-pin Alleys, and of the number of Criminal Prosecutions in each county in the State. Compiled from the Auditor's Report for the year ending October 10, 1852.

COUNTIES.	Free Population.	Free Persons Blind.....	Free Deaf and Dumb.....	Free Idiots.....	No. of Children between 5 and 16 years	No. of Taverns...	No. Coffee-houses	No. 10 pin Alleys	No. Crim. Pros. & Presentments.
Adair	8,191	1	6	11	2,298	6	...	...	47
Allen	7,428	1	3	16	2,261	3	...	...	45
Anderson	4,978	4	6	4	1,739	10	...	...	52
Ballard	4,654	1	.....	.....	1,477	8	...	...	42
Barren	15,656	1	1	8	4,476	7	...	...	25
Bath	9,580	3	1	10	2,816	11	...	...	33
Boone	9,081	1	5	2	2,340	10	...	...	14
Bourbon	7,400	4	4	3	1,635	15	...	2	19
Boyle	5,692	3	3	7	1,437	9	...	2	49
Bracken	8,063	2	4	6	2,357	5	...	...	41
Breathitt	3,615	1	5	5	1,225	2	...	...	49
Breckinridge	8,627	.....	.....	3	2,399	8	...	1	21
Bullitt	5,419	.....	1	5	1,402	12	...	...	18
Butler	5,074	3	9	1	1,781	7	...	...	29
Caldwell	9,941	4	3	2	2,853	7	...	...	75
Calloway	7,104	2	3	2	2,250	3	...	...	39
Campbell	12,950	4	1	4	2,753	.....	5	...	35
Carroll	4,577	.....	.....	*	1,320	6	...	...	18
Carter	5,984	4	2	1	1,947	2	...	...	.....
Casey	5,922	4	.....	6	1,682	2	...	1	35
Christian	11,440	3	5	3	3,087	7	...	2	27
Clarke	7,843	4	4	5	2,146	8	...	1	34
Clay	4,906	.....	3	13	1,542	2	...	...	89
Clinton	4,627	1	3	5	1,486	4	...	...	60
Crittenden	5,503	.....	.....	.....	1,747	3	4	...	22
Cumberland	5,520	.....	.....	9	1,617	8	...	...	12
Daviess	9,473	2	4	2	2,837	9	...	3	22
Edmonson	3,763	1	1	*	1,051	2	...	...	14
Estill	5,574	.....	1	6	1,784	3	...	...	74
Fayette	11,846	2	5	1	2,321	10	10	3	28
Fleming	11,775	3	4	8	2,917	13	...	6	40
Floyd	5,565	.....	.....	6	1,684	2	...	...	127
Franklin	9,097	9	6	3	2,225	11	...	1	55
Fulton	3,503	.....	.....	.....	970	3	...	...	24
Gallatin	4,433	1	3	1	1,169	2	...	...	9
Garrard	7,061	3	3	2	2,130	3	...	...	63
Graves	9,958	.....	2	4	2,981	9	...	...	*
Grant	5,999	2	6	10	1,958	11	...	2	31
Greenup	9,048	.....	.....	3	2,139	5	...	...	.....
Grayson	6,517	5	6	9	2,203	7	...	...	13
Greene	6,452	3	2	1	2,045	3	...	...	28
Hancock	3,231	.....	.....	.....	936	3	...	1	25
Hardin	12,066	7	5	8	3,519	18	...	2	19
Harlan	4,145	.....	1	8	1,360	2	...	...	49
Harrison	9,879	.....	2	6	2,405	8	...	...	.....
Hart	7,792	7	3	1	2,423	5	...	...	49

TABLE D.—*Continued.*

COUNTIES.	Free Population.	Free Persons Blind.....	Free Deaf and Dumb.....	Free Idiots.....	No. of Children between 5 and 16 years	No. of Taverns...	No. Coffee-houses	No. 10 pin Alleys	No. Crim. Pros. & Presentments.
Henderson	7,774	3	2	1	2,204	2	...	...	50
Henry	8,429	3	3	5	2,429	16	...	...	24
Hickman	3,950	1	.....	4	1,226	4	...	...	65
Hopkins	10,249	1	1	7	3,080	6	...	...	11
Jefferson	48,920	7	6	2	10,108	54	30	...	99
Jessamine	6,424	4	8	2	1,566	4	...	2	57
Johnson	3,843	.....	1	6	1,326	3	...	...	63
Kenton	16,208	3	5	1	4,471	55	3	3	91
Knox	6,438	1	1	13	1,897	7	...	...	98
Laurel	3,953	.....	2	9	1,518	7	...	...	46
La Rue	5,187	2	.....	*	1,492	4	...	...	9
Lawrence	6,144	1	2	4	1,940	5	...	...	51
Letcher	2,450	.....	.....	2	757	5	...	...	*
Lewis	6,880	2	3	6	2,049	4	...	...	74
Lincoln	6,738	2	4	8	1,767	8	3	1	97
Livingston	5,460	2	.....	3	1,327	3	...	1	36
Logan	11,114	2	13	7	3,115	.....	...	...	.....
Madison	10,334	3	10	8	2,974	7	...	4	62
Marion	8,679	2	2	5	2,433	7	...	...	31
Mason	14,060	6	7	7	3,582	11	5	...	21
Marshall	5,020	14	1	2	1,655	4	...	...	39
McCracken	5,259	.....	3	4	1,559	3	14	9	70
Meade	5,820	.....	.....	4	1,519	8	...	3	24
Mercer	10,807	8	4	23	2,571	4	1	5	100
Monroe	6,925	6	4	3	2,085	1	...	...	*
Montgomery	6,830	2	2	1	1,930	8	...	1	35
Morgan	7,433	5	14	11	2,468	5	...	...	64
Muhlenburg	8,287	3	1	2	2,365	5	...	...	43
Nelson	9,659	.....	3	2	2,221	9	...	...	26
Nicholas	8,848	1	19	10	2,326	5	...	2	26
Ohio	8,617	2	5	6	2,650	6	...	...	39
Oldham	5,205	.....	2	3	1,402	6	...	7	31
Owen	8,930	.....	.....	20	2,553	5	...	...	6
Owsley	3,638	.....	.....	4	1,202	3	...	...	63
Pendleton	6,265	2	.....	3	1,438	3	...	...	22
Perry	2,075	.....	.....	7	1,034	.....	...	...	*
Pike	5,267	1	.....	6	1,539	1	...	...	85
Powell	.....	1	1	.....	602	3	...	...	*
Pulaski	12,888	.....	4	9	4,124	7	...	...	70
Rock Castle	4,322	3	5	11	1,376	4	...	...	114
Russel	4,914	5	2	4	1,472	5	...	6	27
Scott	9,110	8	2	11	2,312	17	...	...	15
Shelby	10,487	2	4	.....	2,775	21	...	1	16
Simpson	5,798	.....	4	2	1,604	1	...	...	20
Spencer	4,691	.....	1	3	1,329	1	...	...	5
Taylor	5,610	1	10	1	1,592	6	...	1	29
Todd	7,458	3	2	6	2,066	4	...	...	17
Trigg	7,332	3	6	.....	2,006	4	...	...	47
Trimble	5,022	.....	2	2	1,487	10	...	1	16
Union	6,720	.....	.....	2	2,070	1	...	...	27
Warren	10,806	3	6	1	3,168	1	...	1	42
Washington	9,142	3	3	7	2,668	9	...	...	130
Wayne	7,862	1	3	13	3,423	.....	2	1	65
Whitley	7,246	.....	2	17	1,917	5	...	...	*
Woodford	6,047	4	2	3	1,296	8	3	...	*
Total	771,424	222	304	513	215,195	230	80	78	3901

The gross amount of each of these items in the foregoing tables, except population, for the year ending Oct. 30, 1850, is subjoined:

Free persons blind, 206; Free Deaf and Dumb, 278; Free Idiots, 432; Number of Children between 5 and 16 years, 202,840; Number of Taverns, 448; Number of Coffee-houses, 132; Number of Ten-pin Alleys, 76; Number of Criminal Prosecutions and Presentments, 3,648.

During the decade, 1840–'50, the white population of Kentucky increased something more than 29 per cent. For the two years since the census, we shall assume the same rates of increase, which will make as near as may be 6 per cent., which, added to the census value (761,688), gives 807,379 as the white population of Kentucky at the date of the auditor's report.

Upon this basis, we find that 1 in every 3,637 is blind, 1 in 2,956 deaf and dumb, and 1 in 1,573 an idiot. This is a small decrease for the blind and idiotic, and a small increase for the deaf and dumb since 1850, when the numbers were 1 in 3,207, 2.739.88, and 1.531.68 respectively.

We do not see that any conclusion can be safely drawn from the table as to any connection between the drinking houses and crime. The number of criminal prosecutions appears startling. That there should be one offender in every 264.4, does, at first sight, appear strange. It is a slight increase, too, upon 1850, when the proportion was one in 269.3. We are to remember, however, that this number includes all grades of crimes and offenses which come before the grand jury, as selling spirits without license, keeping disorderly houses, failing to keep the public roads in order, etc. In looking over the different counties, we shall be struck with the great disparity. Whilst in a very few no prosecution was commenced, in others there were 130, 127, 114, 100, and so on down to 5. We should naturally have expected that the larger towns situated on the Ohio river would have furnished the largest portion of prosecutions;—and in truth they do furnish as many as we should have expected, yet they are cast entirely in the shade by some of the interior counties—and they not of the most populous class. The county of Jefferson, including the city of Louisville, with a population of 60,000, is surpassed by Washington, Floyd, Rock Castle, and Mercer, neither of which contains 15,000; whilst Knox, Lincoln, Clay, Estill, and Pike, press her hard. All of these are interior counties, with population varying from 6 to 12,000—a rather sad commentary

upon the opinion that rural districts are characterized by peace, contentment, and virtue.

The members of the society are aware that but one enumeration under the Registration Law has been made. The results of that return have not yet been made public; but enough is known to show that the returns from nearly all the counties are very imperfect. It is thought probable that about *twenty or twenty-five per cent.* have been omitted. This perhaps is, upon the whole, as well as we had a right to expect.

Perhaps it may be proper to refer briefly to some of the causes which have contributed to the imperfection of the returns. We have no organization in Kentucky which is favorable for collecting the facts required by the law. In Massachusetts, formerly, the duty of collecting the facts was placed upon the school committees, which, upon the whole, was perhaps better than any organization which we possess. Nevertheless, that was found to be unsatisfactory, and the duty is now required of clerks of towns, *i. e.*, townships or sections of country about five miles square. These clerks are allowed pay for their services, and are liable to penalties for neglect. In Kentucky it was thought best to devolve the duty of collecting the facts upon the assesssor of taxes, whose duty requires him to visit every family in the county. As a means of assisting and correcting the memory of heads of families as to dates, etc., it was made the duty of clergymen, physicians, and midwives, to lodge with the clerk of the county court, and before the assessor's books are delivered to the auditor, certificates stating the facts of each birth, marriage, and death occurring under their notice. These certificates were to be carried by the assessor whilst taking his list of taxable property, and used as above specified. This was thought to be necessary to give accuracy to facts which had occurred so long before the visit of the assessor. These certificates having been filled immediately upon the occurrence of the fact would be entirely reliable.

It is to be regretted that a considerable portion of those whose duty it was to fill these certificates, did not know that such certificates were lodged in the clerk's office ready for them. They had failed, too, to furnish themselves with the law showing what was required of them. Many who intended fully to do their duty, presumed that at the end of the year they could

make out their list just as well as to make the record at the time of the occurrence of the fact—whereas, when the time came, they found themselves utterly unable to state the several facts required. It is objected that there is much difficulty in filling the certificates; and further, that carrying and examining them as the assessor is collecting facts, is very troublesome. In answer to this, it is acknowledged that difficulty would be experienced in filling the blank certificates, if they were presented without any guide as to how they are to be filled; but the certificates are accompanied by forms already filled, so that it is thought no difficulty need be experienced in filling the blank by the aid of one already filled as a sample.

Again, as the certificates are presented in sheets, they can very conveniently be laid between the leaves of the blanks furnished to the assessor, when they will be ever ready for reference. It is true that very small amount of attention may be "too troublesome" to those who seek only the pay which their offices bring, without at all caring to do their work properly. It is submitted that no man has a right to accept an office without a determination to discharge the duties thereof faithfully.

Again, any assessor who wishes to do his duty can, by some attention to the list of certificates, fix in his mind, to a great extent, the families in which records are to be expected. If he will inquire what physician attends the family, he can, by referring to the list furnished by that physician, very generally ascertain the fact desired. Not a few, also, considered the duty imposed onerous, and an unjust requirement by the State, not reflecting that having the recorded facts in their possession would more than compensate them for the trouble of recording.

Again, some who had properly attended to filling the certificates, not appreciating the importance of punctuality, failed to place them in the clerk's hands against the appointed time, so that the assessor had recovered his books before the certificates were delivered to the clerk.

The assessors, in some instances at least, did not choose to be burthened with the certificates of physicians, etc., and did not take them in their rounds. Of course, they did not feel the importance of a faithful discharge of their duty; and although they may have inquired of the different families if

there had been any birth, marriage, or death, yet it was probably done in a manner so careless as by no means to impress upon the hearer the importance of a correct answer. The family too being unexpectedly inquired of as to these items, was by no means ready to give a prompt and correct answer.

This is not the place to go into a labored argument as to the advantages of a proper execution of a well regulated Registration Law, yet it does seem that a few considerations on that head may be indulged. The three important eras of every man's life are those of his birth, marriage, and death. The first and last mark the commencement and the end of his earthly career. By the first two he acquires an interest in the life, happiness, and property of others, which are to continue during his life. By the last, others become interested in what has been his. Every man feels an interest in the history of his ancestors; nay, of his collateral relations. It is an item in his happiness which he has a right to enjoy. But no man can have this enjoyment except by duly legalized registration. Say that a young man wishes to exercise his elective franchise, the proof of his right, or the reverse, must be sought in the *family record*, which is no *authentic* record. Is he prosecuted for illegal voting? His father should not be exposed to the temptation of screening him from deserved punishment, nor to the temptation, true or false, of having borne "false witness" in his case.

Again, many persons lose property to which they are justly entitled, because they are not able to prove the parentage of themselves, or of some one of their immediate predecessors. Individual cases of this kind are within the knowledge of most men. Of course, the aggregate amount of such cases must be enormous. The same is emphatically true of persons entitled to pensions; so true, indeed, as to draw from a person extensively engaged in prosecuting pensions for poor soldiers, the remark, "That the constitution of every State ought to require the Legislature to keep up a well regulated registry law." Such a law, indeed, the constitution of the State of Virginia does require.

Marriage is a relation of so many, and such complicated phases, that every one entering upon it has a right that that fact should be placed beyond the posssibility of a doubt. In-

deed, for very many years our laws have provided for a record of marriages, but it has been miserably executed. About one-fourth of all marriages solemnized have not been recorded, and there is, of course, no public record of them. But grant that all were duly returned and recorded, the burning of the clerk's office puts a complete blot upon all such records. Long and expensive lawsuits are sometimes prosecuted, in which one main feature is to deny a marriage.

As every man ought to understand his own condition in a pecuniary point of view, and to use all proper means to improve it, so a State ought to understand her condition, and strive to improve it. The wealth of a State consists, it is true, to some extent, in the amount and quality of her lands, and of other kinds of property, but mainly in the number of able bodied yeomen. She ought, therefore, to take special pains to know how she stands in this respect, and what means will promote an increase of that species of wealth. Kentucky can tell you (as indeed it is proper that she should), how many acres of land she has, how many town lots, how many slaves, how many horses, mares, studs, jacks, and bulls—how many mules and jennies—how many cattle and hogs. She can tell you also the value of her lands, her negroes, her horses, jennies, mules, cattle, and hogs to a cent, and their increase or decrease in value from year to year. But can she tell you the number of children born, the number who are married, or the number dying every year? Alas, no! Shall man, for whose benefit those things are, be lost sight of by our lawmakers? We thank God that the time has at length come when a man is considered as much worthy of interest as a mule or a hog. She is content to proclaim the fertility of her soil, and the salubrity of her climate, but when you ask for the evidence of the salubrity of her climate, you are answered by general impressions, which avail nothing. As she can exhibit nothing definite as to her health, so she can say nothing as to the diseases with which her people die. One great good resulting from registration, will be to point out where particular diseases prevail. It will show where death prevails in the shape of fever, of dysentery, of pneumonia, etc. This having been ascertained, the next inquiry will be, wherein does one locality differ from another? What, in fact, determines the presence

of one disease in preference to another? Here, it is true, much difficulty will be experienced; but indefatigable labor, and ceaseless perseverance, will overcome vast obstacles. When a man cuts his throat or blows out his brains, there can be no question as to the cause of his death, or whether it might have been prevented. When he heedlessly goes, unprotected, into the presence of small pox, sickens and dies, the case is equally clear. When, by continued intoxication, he comes down to the grave, a sot and a beast, he is as much a suicide as if he had cut his throat. He who constantly and unceasingly subjects himself to the sources of disease and death, can not be held innocent of his death, or, at least, of "tempting the Lord his God." Now all the causes of disease and death are, more or less, capable of being prevented or mitigated; and it is usually acknowledged that those which destroy life in vastly the greatest numbers (the zymotics), are mostly under control. It is truly difficult to realize the amount of sickness and death in any community which *might be prevented.* Hear what Dr. Playfair says, after making a sanitary survey of Lancaster county, England:

"There are yearly in that county 398,100 cases of sickness, and 14,000 deaths which might be prevented. Of the deaths, 11,000 are of adults engaged in profitable labor. And further, that every individual in that county loses nineteen years, or nearly one-half of the proper term of his life, and that every adult loses more than ten years of his life, and from premature old age and sickness, much more than that period of working ability. That 'the annual slaughter from typhus alone in England and Wales is greater than the loss sustained by the allied armies on the battle of Waterloo.' Yet what sort of a battle do we here find fought and won by preventable diseases against the population of Lancaster. What could be thought of a war in which 5,000 able bodied men in one county fell every year in battle? And yet this is only half of the number annually slaughtered in that country by removeable epidemics."

Such being the case, why, in the name of suffering humanity, should not physicians and people unite as one man, and by undivided, continued effort, endeavor to control the ravages of the fell destroyer? Will any man pretend that it is not the duty—the *imperative duty*—of the Legislature to act in this

matter? It is, surely, the duty of the State to increase her wealth in able bodied citizens. This is to be done by preventing death in her population, and sickness among the living. It is her duty, then, to impress upon her people how sickness and death are to be prevented. But she should not stop here. She has laws for the protection of the beasts of her forest, and the fish of her rivers. She will not suffer a man to hunt or fish upon his neighbor's land without his consent. She will not suffer him to burn down his own house, or use his own property to the annoyance of his neighbor. Can not she make it penal—and prohibitory penal—for a man to introduce contagious diseases among her people? Can she not, and ought she not, now, to enact laws that should compel cities as large as Louisville now is, to have large open squares supplied with grass and trees, for the health and pleasure of the public? Can she not, and ought she not, now, to pass laws which should forever prevent owners of lots in cities from building upon them such tenements as can not be properly ventilated and cleansed? Such tenements are as fatal to the occupants as the hook is to the fish, or the gun to the partridge. They will assuredly do here what they have done in London, Liverpool, New York, Philadelphia, Boston, and every where that they exist—produce death among the inmates, and disease and death in the neighborhood. As there is a direct and inevitable connection between ill ventilated, dirty, crowded houses, and impurity, vice, disease, and death of their inmates, is it right, or should it be lawful, for any man to build or keep such tenements as a snare for the destruction of both body and soul of his fellow-man?

We shall be cheered in these labors in investigating and removing the causes of disease, by recollecting the success attending the investigations of Lieut. Maury, U.S.N. It is well known that this gentleman, by a thorough investigation of the winds and currents of the ocean, predicted that a ship making a particular course, one, too, altogether unusual, would make an unprecedented quick trip—nay, he ventured to name the number of days required. The experiment verified his prediction to the letter.

We hope, then, to make our people longer lived. In doing this we shall necessarily make them better citizens. If you wish to see vice, in all its most appalling forms, you have only

to go to some place where life is insecure. There, no value is attached to life, and there the gratification of the passions is considered the chief good. The convenience, the property, the lives of others, are not of the least consideration. How else can we explain the fact of men playing cards upon the coffin of their comrade? Friend, there is none.

Whilst we are adding to the life and morality of the people, we shall certainly make them more provident, more happy. As the probability of life improves, more pains will be taken to provide for its wants and its comforts—men will earn more, and spend less, and there will be fewer real paupers.

But because the first year has given returns so unsatisfactory, some may be disposed to be discouraged, and abandon the subject. There is no cause whatever for discouragement. We should always have an eye to the experience of other countries. In Massachusetts, where they are now reaping a golden reward in this line, I am informed by Dr. Josiah Curtis, an eminent statist, that, for the first seven years, no reliance as to accuracy could be placed on the returns; yet they afforded much useful matter. In fact, by examining their records, we find that their returns were quite meager. In 1842, the first year of registration, but 8,470 births were recorded; in 1844, 14,646; and in 1849, 25,773. Now it is evident that much of this increase is to be ascribed to more correct returns. We have evidence, too, throughout the whole series of years, that the subject was engaging more and more attention, and becoming more and more popular.

It is a matter of pride and gratulation that, in adopting this measure of Registration, Kentucky has taken the lead of all the new States, and of many of the old ones. Massachusetts, New Jersey, New York, Connecticut, New Hampshire, and Pennsylvania, have preceded us. Rhode Island and Virginia have followed close on our heels, and several States now have the subject before them. It would seem that to get the matter once properly before the minds of the people would be to secure its favor.

As Kentucky stands in the front rank upon this most important measure—"THE GREAT QUESTION OF THE AGE"—may we not hope that the public spirit and philanthropy of our physicians, and the intelligence of our people, will soon put our

law in complete and efficient operation? It affords us much pleasure to say that such assessors books as have come under our observation have been exceedingly creditable in the nomenclature of diseases. And why is it that Kentucky should not stand abreast of the foremost in this struggle to improve the health, happiness, morality, and life of her people?

> "May'nt Massachusetts boast as great
> As any other sister State?"

Was asked more than half a century ago by a boy "three feet high;" and nobly has her history maintained her claim. Why may we not use the same language as to Kentucky? When was corn, or horses, or hogs wanted, that she did not furnish her full quota? When were soldiers wanting to maintain our country's rights or honor, and she did not offer more than her proportion? What State has sent more talents into our national councils? What State surpasses her in her bench, bar, or pulpit? I say it without fear of contradiction, she is no whit behind the very best. Shall she, then, lag behind *any of her sisters* in her efforts to promote the health, morality, and happiness of her people? *God forbid.*

My connection with the Registration Reports enables and tempts me to construct and lay before the Society the following table, which gives a tolerably comprehensive view of the condition of the State, so far as is developed by the returns under the law requiring a registration of births, marriages, and deaths.

And here I will take occasion to modify what was said in reference to these returns in the forepart of this report. Having finished digesting these reports, they are found much more full than was supposed. They furnish facts, more or less full, of 25,906 births, 5,005 marriages, and 13,048 deaths—in all, 44,059 cases. This, so far from being a failure, must be considered a triumphant success in our first effort.

Time and other duties forbid that this table should be considered and commented on in as many aspects as it admits; but it is hoped that it affords food for much serious reflection. I will remark here that nothing has been put down upon assumption or conjecture—*e. g.*, the columns which report the average age at death of the white and the colored in each county, are filled by adding the age of every white whose age

is reported, and the aggregate amount of ages divided by the number of whites whose ages are set down. The same course was pursued with the colored. That this is the only proper way to ascertain the average, will be evident to all when it is stated that the average of all dying in Scott county under five years, was not 2.5 years, but 1.13 years—a very little more than one-half of what most persons would *consider* the average. In Edmonson, Lincoln, and Morgan, the average age of the colored at death, was from an hour to three days. It will be observed that but three colored deaths are reported from Lincoln, and one each from Edmonson and Morgan:

Births, Marriages, and Deaths Returned to the Auditor's

COUNTIES.	Population in 1850.		BIRTHS.								MARRIAGES.	
			WHITE.				COLORED.					
	White.	Col'rd.	Whole No.	Sex.			Whole No.	Sex.			Returned by Assessor.	License by Clerk.
				M.	F.	U.		M.	F.	U.		
Adair	8,083	1,815	123	66	56	1	22	14	8	.....	37	68
Allen	7,389	1,352	245	130	115	.....	39	18	21	.....	51	42
Anderson	4,946	1,312	191	79	112	.....	52	21	31	.....	63	68
Ballard	4,628	868	61	37	24	.....	9	5	4	.....	.....	40
Barren	15,543	4,697	319	171	148	.....	105	56	49	.....	73	120
Bath	9,477	2,638	314	151	163	.....	96	46	47	3	80	88
Boone	9,044	2,141	335	188	147	.....	81	42	39	.....	97	85
Bourbon	7,158	7,642	200	102	98	.....	244	114	130	.....	48	78
Boyle	5,379	3,737	146	75	71	.....	90	52	38	.....	59	59
Bracken	7,948	955	200	113	107	.....	24	14	10	.....	61	87
Breathitt	3,603	182	130	61	69	.....	2	1	1	.....	26	.....
Breckinridge	8,616	1,977	300	161	140	.....	60	32	28	.....	55	82
Bullitt	5,392	1,382	110	52	58	.....	31	18	13	.....	44	57
Butler	5,056	699	233	135	98	.....	22	12	10	.....	53	49
Caldwell	9,809	3,239	277	137	140	.....	40	28	12	.....	43	102
Calloway	7,094	1,102	253	130	123	.....	49	31	18	.....	58	57
Campbell	12,871	276	504	276	228	.....	4	4	.....	.....	83	127
Carroll	4,552	974	86	44	42	.....	25	14	11	.....	38	52
Carter	5,961	280	276	135	141	.....	6	4	2	.....	47	43
Casey	5,863	693	109	64	45	.....	12	7	5	.....	56	53
Christian	11,309	8,271	275	151	122	2	248	124	122	2	58	92
Clarke	7,709	4,974	91	47	44	.....	70	40	30	.....	6	62
Clay	4,739	682	205	105	100	.....	12	5	7	.....	26	35
Clinton	4,591	298	210	123	87	.....	6	2	4	.....	35	28
Crittenden	5,474	877	172	78	94	.....	16	9	7	.....	42	63
Cumberland	5,477	1,528	131	69	62	.....	37	13	24	.....	27	32
Daviess	9,423	2,930	153	76	77	.....	42	21	21	.....	37	98
Edmonson	3,753	335	65	36	29	.....	.....	.....	.....	.....	27	.....
Estill	5,568	417	210	100	110	.....	9	8	1	.....	60	58
Fayette	11,180	11,555	150	86	64	.....	196	103	93	.....	76	120
Fleming	11,628	2,286	299	171	128	.....	69	34	35	.....	93	98
Floyd	5,503	211	88	55	33	.....	3	1	2	.....	21	43
Franklin	8,741	3,721	161	85	76	.....	74	41	33	.....	60	82
Fulton	3,499	947	71	45	26	.....	17	12	5	.....	18	23
Gallatin	4,399	738	123	69	54	.....	15	12	3	.....	29	49
Garrard	7,036	3,201	210	106	104	.....	107	60	47	.....	52	75
Graves	9,949	1,448	311	172	139	.....	60	34	26	.....	85	88
Grant	5,994	537	180	90	88	2	10	4	6	.....	29	48
Greenup	8,998	656	197	115	82	.....	4	2	2	.....	52	70
Grayson	6,512	325	177	88	89	.....	10	5	5	.....	42	57
Greene	6,335	2,725	215	109	106	.....	102	54	48	.....	64	73
Hancock	3,216	637	153	80	73	.....	31	20	11	.....	37	36
Hardin	12,023	2,502	250	131	117	2	60	32	28	.....	90	120
Harlan	4,109	159	107	53	54	.....	5	2	3	.....	36	39
Harrison	5,739	3,325	212	111	101	.....	46	20	26	.....	35	114
Hart	6,740	1,353	322	171	151	.....	36	20	16	.....	55	61
Henderson	7,654	4,517	176	93	83	.....	139	79	60	.....	54	104
Henry	8,376	3,066	280	159	121	.....	108	60	48	.....	109	99
Hickman	3,932	859	131	73	58	.....	34	15	19	.....	37	47
Hopkins	10,199	2,242	243	135	108	.....	47	26	20	.....	98	97
Jefferson	47,329	12,502	251	135	113	3	89	53	36	.....	146	862
Jessamine	6,289	3,960	185	98	87	.....	164	87	77	.....	43	49
Johnson	3,843	30	128	68	60	.....	.....	.....	.....	.....	37	41
Kenton	16,116	922	469	259	210	.....	19	11	8	.....	96	217
Knox	6,239	811	133	79	54	....	8	8	.....	.....	11	33
Laurel	3,946	199	196	101	95	.....	5	2	3	.....	52	50
La Rue	5,177	682	211	93	118	.....	22	11	11	.....	52	58
Lawrence	6,143	138	142	70	12	.....	4	2	2	.....	44	44

Office for the year ending December 31, 1852.

DEATHS.								PROPORTION.						
WHITE.				COLORED.				BIRTHS.		MARRIAGES.	DEATHS.			Average age at death.	
Whole No.	Sex.			Whole No.	Sex.			One in			One in		Per cent whole popula'n.		
	M.	F.	U.		M.	F.	U.	W. pop	C. pop.		W. pop	C. pop.		White	Col'rd.
64	38	23	.....	3	1	2	.....	65.71	82.50	118.86	130.87	605.00	154.65	22.65	16.50
69	28	41	.....	18	9	9	.....	30.16	34.70	175.93	110.27	67.65	100.49	20.50	21.24
61	36	28	.....	30	13	17	.....	25.84	25.23	72.73	77.29	43.73	66.57	20.83	9.75
46	26	20	.....	17	9	8	.....	75.87	96.44	115.50	100.60	51.00	87.23	18.72	12.55
149	70	79	.....	51	23	28	.....	48.72	44.70	129.50	105.00	92.00	101.69	26.33	22.75
104	55	49	.....	49	28	21	.....	30.17	27.37	107.70	90.93	53.83	79.83	20.35	21.40
193	109	84	.....	62	30	32	.....	27.00	26.45	106.40	46.86	54.53	43.81	22.69	27.00
196	99	97	.....	166	86	80	.....	35.79	31.32	91.77	36.52	46.00	49.88	28.87	16.45
49	27	22	.....	47	21	26	.....	36.84	41.52	91.17	107.58	81.24	94.95	24.40	19.33
108	61	47	.....	8	3	5	.....	36.12	39.79	91.35	73.59	119.12	68.13	18.77	13.22
33	19	14	.....	.....	.....	.....	.....	27.71	91.00	138.57	109.18	.....	114.70	14.43	.....
154	89	65	.....	23	14	9	.....	28.72	32.95	156.61	55.58	82.47	59.51	19.66	28.75
76	35	41	.....	31	20	11	.....	49.09	44.58	92.84	70.92	44.58	63.31	19.50	21.00
127	65	62	.....	18	9	9	.....	21.70	31.77	103.39	39.81	38.83	39.69	19.78	29.54
84	45	39	.....	15	8	7	.....	36.00	147.22	96.16	116.77	215.93	131.75	31.04	14.34
119	60	59	.....	37	22	15	.....	28.03	22.49	124.47	59.61	29.79	52.47	22.63	12.12
234	132	102	.....	3	1	2	.....	25.53	69.00	155.07	55.00	92.00	55.47	17.11	24.00
34	22	12	.....	6	.....	6	.....	52.93	39.00	87.53	133.88	162.33	138.15	16.43	15.01
76	32	44	.....	3	2	1	.....	21 59	46.66	138,16	78.43	93.33	79.00	13.93	16.11
46	25	21	.....	5	2	3	.....	53.78	57.75	110.62	127.45	138.60	128.43	21.93	26.56
131	66	65	.....	195	115	80	.....	41.08	33.35	122.81	86.32	42.41	60.06	19.16	21.62
66	34	32	.....	81	40	41	.....	85.81	71.05	124.34	116.80	61.40	86.26	27.42	15.43
62	35	26	1	...	.....	.....	.....	23.11	56.83	138.25	76.43	.....	87.43	13.36	.....
60	29	31	.....	1	.....	1	.....	21.86	49.66	163.96	76.51	298.00	80.14	19.54	45.
83	46	37	.....	10	6	4	.....	31.82	54.81	130.33	65.96	87.70	68.29	16.62	24.33
42	14	28	.....	17	10	7	.....	42.03	41.29	171.15	130.40	89.88	118.73	32.87	23.00
93	44	49	.....	21	9	12	.....	66.58	69.76	95.13	101.32	139.52	108.36	21.00	17.25
32	24	8	.....	1	.....	1	.....	57.75	.....	139.00	117.28	.....	123.54	19.41	.....
97	47	50	.....	13	6	7	.....	24.51	46.33	96.00	57.40	32.07	54.40	19.45	12.08
90	47	41	2	124	70	54	.....	74.43	58.95	93.16	124.22	93.18	106.14	21.89	18.22
162	79	83	.....	44	23	18	3	38.85	33.13	119.83	71.77	51.90	62.68	22.08	22.90
13	8	5	.....	2	1	1	.....	62.53	70.33	128.00	423.30	105.50	380.93	21.69	14.00
118	45	73	.....	47	23	24	.....	54.29	50.28	106.59	77.07	79.17	75.52	22.58	22.00
66	43	28	.....	12	6	6	.....	49.28	53.70	152.12	52.01	78.91	57.00	21.50	16.45
45	24	21	.....	11	5	6	.....	35.76	49.20	89.77	97.75	67.09	91.73	17.20	10.03
94	51	43	.....	68	36	32	.....	33.50	30.19	93.81	74,85	47.07	63.19	19.00	20.50
137	67	70	.....	23	13	10	.....	31.99	24.13	114.19	72.62	62.96	71.23	25.17	14.75
69	26	43	.....	5	2	3	.....	33.30	53.70	124.87	86.86	107.40	88.27	21.58	9.00
80	37	43	.....	.....	...	.....	.....	45.67	164.00	128.52	112.47	.....	120.60	16.17	.....
101	53	48	.....	5	3	2	.....	36.79	32.50	114.24	64.47	65.00	64.50	15.70	7.70
79	40	39	.. ..	34	16	18	.....	27.60	26.71	85.46	80.19	80.14	80.17	19.03	18,08
66	34	32	.....	8	3	5	.....	21.02	20.55	89.33	48.72	79.62	52.07	15.08	16.03
189	89	100	.....	47	29	18	.....	48.09	41.70	100.29	63.61	53.23	66.54	22.16	21.33
29	18	11	.....	2	1	1	.....	38.40	31.80	105.30	141.69	79.50	137.35	33.07	13.00
114	52	62	.....	42	18	24	.....	27.07	72.28	50.34	50.34	79.16	58.10	23.05	28.01
154	74	80	.....	35	15	20	.....	20.93	37.58	110.48	43.76	38.65	42.82	18.91	17.75
103	57	46	.....	78	41	37	.....	43.48	52.49	73.59	74.31	58.00	67.25	17.77	16.95
127	59	68	.....	44	19	25	.....	19.91	28.38	76.83	65.95	69.68	66.32	15.60	17.41
123	59	64	.....	17	11	6	.....	30.01	25.26	83.66	31.96	50.53	34.22	20.59	10.88
217	115	102	.....	52	27	25	.....	41.97	47.80	105.14	47.00	43.11	46.28	16.51	16.91
136	66	70	.....	69	38	31	.....	188.58	140.48	54.90	348.00	181.19	291.85	24.58	17.75
67	33	34	.....	50	30	20	.....	34.00	24.08	128.34	93.86	79.20	87.60	23.61	19.06
19	7	12	.....	.....	...	.....	.....	30.02	.....	93.66	202.26	.....	203.84	20.72	.....
176	98	78	.....	13	5	8	.....	34.36	48.52	74.26	91.56	70.92	90.14	21.14	25.76
229	17	12	.....	5	2	3	.....	46.90	101.37	189.06	215.13	162.50	207.35	22.86	23.80
72	39	33	.....	.....	...	.....	.....	20.13	39.80	78.92	54.80	.....	57.57	23.41	.....
87	37	50	.....	9	6	3	.....	24.06	31.00	89.26	29.50	75.77	61.03	26.25	21.66
60	35	25	.....	.....	.....	.....	.....	43.26	34.50	139.61	102.38	.....	104.68	21.58	.....

COUNTIES.	Population in 1850.		BIRTHS.								MARRIAGES.	
			WHITE.				COLORED.					
	White.	Col'rd.	Whole No.	Sex.			Whole No.	Sex.			Returned by Assessor.	License by Clerk.
				M.	F.	U.		M.	F.	U.		
Letcher	2,440	72	110	55	55	.....	3	2	1	.....	22	42
Lewis	6,869	333	120	75	45	.....	5	2	3	.....	44	62
Lincoln	6,635	3,458	127	66	61	.....	26	13	13	.....	75	71
Livington	5,404	1,174	164	105	59	.....	36	17	19	.....	38	25
Logan	10,751	5,830	280	146	134	.....	171	101	70	.....	100	101
Madison	10,270	5,457	409	213	176	.....	127	91	36	96*	78	121
Marion	8,599	3,166	229	128	101	.....	111	67	44	.....	56	94
Marshall	5,020	249	259	130	129	.....	19	12	7	.....	44	41
McCracken	5,241	826	159	83	76	.....	30	18	12	.....	48	61
Meade	5,799	1,594	91	44	47	.....	34	14	20	.....	23	51
Mercer	10,472	3,595	283	149	134	.....	93	50	43	.....	68	107
Monroe	6,902	854	250	143	107	.....	34	17	17	.....	43	77
Montgonery	6,671	3,232	146	63	83	.....	100	47	53	.....	40	40
Morgan	7,395	225	283	142	141	.....	5	2	3	.....	59	81
Muhlenburg	8,250	1,559	26	13	13	.....	6	2	4	.....	5	89
Mason	13,675	4,669	382	185	197	.....	147	68	79	.....	106	148
Nelson	9,550	5,239	193	104	89	.....	127	64	63	.....	55	.....
Nicholas	8,683	1,678	152	73	79	.....	39	21	18	.....	48	73
Ohio	8,568	1,181	352	187	165	.....	36	20	16	.....	97	101
Oldham	5,156	2,473	190	100	90	.....	79	42	37	.....	40	51
Owen	8,900	1,544	262	139	123	.....	65	27	38	.....	93	119
Owsley	3,616	158	131	80	52	.....	2	2	.....	.....	15	32
Pendleton	6,230	544	122	66	56	.....	11	8	3	.....	50	75
Perry	2,972	120	140	78	62	.....	1	1	.....	.....	16	33
Pike	5,250	115	226	126	100	.....	2	1	1	.....	42	37
Powell	.....	.....	67	33	34	.....	6	4	2	.....	20	11
Pulaski	12,861	1,334	430	227	203	.....	38	17	21	.....	90	109
Rock Castle	4,289	408	121	73	48	.....	5	3	2	.....	42	40
Russell	4,901	448	158	86	72	.....	13	6	7	.....	36	37
Scott	8,891	6,055	172	98	73	.....	115	58	57	.....	69	92
Shelby	10,288	6,807	262	139	123	.....	263	142	121	.....	59	85
Simpson	5,755	1,978	79	43	36	.....	17	12	5	.....	14	24
Spencer	4,659	2,183	101	57	44	.....	85	46	39	.....	27	47
Taylor	5,463	1,787	155	79	76	.....	59	26	33	.....	15	53
Todd	7,361	4,907	164	68	96	.....	49	27	22	.....	20	48
Trigg	7,252	2,877	271	139	132	.....	107	62	45	.....	70	60
Trimble	4,997	966	115	51	64	.....	18	9	9	.....	25	.....
Union	6,704	2,308	113	57	56	.....	18	9	9	69*	.....	62
Warren	10,597	4,526	362	165	197	.....	206	108	98	.....	73	70
Washington	9,086	3,108	238	151	87	.....	84	36	48	.....	63	93
Wayne	7,856	836	288	162	126	.....	28	20	8	.....	59	57
Whitley	7,227	220	201	109	92	.....	3	.....	3	.....	43	40
Woodford	5,882	6,541	135	65	70	.....	156	79	77	.....	32	42
White..	764,688		20,234	10,687	9,537	10					5105	7297
Colored		220,717	5,516	2,938	2,572	6	5516	2938	2572	6		
			25,750	13,625	12,109	16						

To which add the unknown in Madison and Union eouunties.		156
Total Births		25,906
Deaths	13,048	
Still-born	800	13,848
Excess Births over Deaths		12,058
White { Births		20,234
White { Deaths & Still-born		10,255
White { Excess Births		9,979
Col'rd { Births		5,516
Col'rd { Deaths & Still-born		3,581
Col'rd { Excess Births		1,935

Still-born.....
Grand Total....

* These births in Madison and Union counties are unknown as to color, sex, and month.

Continued.

DEATHS.								PROPORTION.							
WHITE.				COLORED.				BIRTHS.		MARRIAGES.	DEATHS.			Average age at death.	
Whole No.	Sex.			Whole No.	Sex.			One in			One in		Per cent whole popula'n.		
	M.	F.	U.		M.	F.	U.	W. pop	C. pop		W. pop	C. pop.		White	Col'rd.
18	8	10	.....	1	1	.....	.....	22.18	24.00	58.09	135.55	72.00	132.21	9.25	16.
59	35	24	.....	1	.....	1	.....	57.24	66.60	110.80	116.42	333.00	120.03	17.58	26.00
96	51	45	.....	3	2	1	.....	52.24	133.00	93.45	69.11	1152.66	101.45	15.76	* top.
102	49	53	.....	17	9	8	.....	32.95	32.61	216.16	52.98	69.06	55.19	14.85	12.00
188	97	91	.....	77	38	39	.....	38.39	34.04	106.44	57.22	75.71	62.57	24.50	20.00
165	45	57	63	146	6	5	135	25.11	42.76	84.87	62.24	37.37	50.56	31.65	35.00
128	59	69	.....	72	42	30	.....	37.11	28.52	91.47	67.18	43.97	58.87	19.33	10.10
106	64	42	.....	15	8	7	.....	19.38	13.10	122.44	47.35	16.60	43.54	17.57	24.53
102	52	50	.....	15	6	9	.....	32.95	27.53	85.91	51.38	55.16	51.85	17.58	19.91
.....	.....	.....	.....	.....	.....	.....	.....	63.72	46.88	113.70	.....	.....	.....	.....	.....
134	69	65	.....	41	23	18	.....	37.00	38.54	96.93	78.14	87.68	80.30	26.12	13.24
63	36	27	.....	9	5	4	.....	27.60	25.11	89.63	109.55	94.88	107.72	14.62	26.28
76	40	36	.....	93	42	51	.....	45.69	32.32	166.77	87.77	34.75	58.60	26.66	13.75
123	63	60	.....	1	.....	1	.....	26.13	45.00	91.29	60.12	225.00	61.93	15.27	* top.
12	5	7	.....	.....	.....	.....	.....	317.30	259.83	92.69	687.50	.....	817.41	6.75	.....
294	161	133	.....	104	44	60	.....	35.79	31.76	92.40	46.51	44.89	46.09	23.16	17.38
107	52	55	.....	81	36	45	.....	49.43	41.25	173.63	84.25	64.68	78.66	25.87	18.75
81	46	35	.....	15	9	6	.....	57.12	42.51	118.94	107.20	111.86	109.01	33.43	17.00
182	98	84	.....	19	8	11	.....	24.34	32.80	88.33	47.07	62.16	48.50	19.33	27.25
111	61	50	.....	65	28	37	.....	27.13	31.30	101.09	46.65	38.04	43.34	21.65	16.50
158	85	65	8	48	23	25	.....	33.97	23.75	95.80	56.32	32.17	50.70	19.75	22.50
75	37	38	.....	.....	.....	.....	.....	27.39	79.00	113.00	48.21	.....	50.32	14.83	.....
68	32	36	.....	11	4	7	.....	51.06	49.45	83.06	48.32	49.45	85.74	20.76	15.68
41	29	12	.....	3	1	2	.....	21.21	120.00	185.75	72.48	40.00	70.27	11.58	2.34
39	22	17	.....	.....	.....	.....	.....	23.23	57.50	141.90	134.61	.....	134.61	25.61	.....
45	22	23	.....	3	2	1	.....	.....	.....	.....	.....	.....	.....	17.20	19.00
158	81	77	.....	12	7	5	.....	29.90	35.10	118.00	81.40	111.16	87.02	21.00	13.13
70	37	33	.....	6	4	2	.....	34.62	81.60	107.90	61.27	64.66	61.80	18.01	12.16
66	36	30	.....	6	5	1	.....	31.01	34.46	132.46	74.25	74.66	74.29	20.45	18.20
76	40	36	.....	68	46	19	3	54.75	51.40	98.68	115.47	98.37	103.86	24.90	18.30
146	81	65	.....	164	98	66	.....	39.26	22.08	121.08	70.46	41.50	55.14	22.08	15.30
80	40	40	.....	16	12	4	.....	22.84	116.35	239.80	71.94	123.62	80.55	.....	.....
76	35	41	.....	45	21	24	.....	46.12	25.68	99.12	61.27	48.51	56.54	29.58	15.74
75	35	40	.....	23	13	10	.....	35.24	30.28	103.07	72.84	75.08	74.00	16.17	15.66
63	36	27	.....	17	7	10	.....	44.88	100.14	153.14	116.84	288.64	153.35	24.74	22.25
129	75	54	.....	64	30	34	.....	26.76	26.88	120.86	56.21	44.95	52.53	17.94	15.08
44	20	24	.....	9	4	5	.....	43.45	53.66	120.86	113.57	107.44	112.50	18.26	13.68
19	11	8	.....	4	3	1	.....	59.33	128.22	108.29	300.21	577.00	391.82	4.69	8.00
190	103	87	.....	86	43	43	.....	28.99	21.48	151.39	55.77	52.38	54.79	18.12	16.66
149	83	66	.....	84	42	42	.....	38.17	57.00	97.70	60.98	37.00	52.33	18.16	16.22
124	61	63	.....	25	16	9	.....	27.27	29.86	136.07	63.35	34.24	57.66	21.75	11.66
45	27	18	.....	.....	.....	.....	.....	35.95	73.33	180.67	160.60	.....	165.49	21.65	.....
87	40	47	.....	122	61	61	.....	43.57	41.93	139.57	67.61	53.61	59.44	26.41	14.33
9,681	4979	4628	74					38.00		102.92	78.28		74.87	20.55	
3,367	6679	1547	141	3367	1679	1547	141		40.00			65.07			17.59
13,048	5658	6175	215												

800
13,848

The population of Kentucky consists of two classes, white and colored, in the proportion of nearly seven of the former to two of the latter. The colored part of the population is again divided into the free and slave, as also into the black and the mulatto. The mulattoes are not only found in the condition of free and slave, but of every possible variety of color from white to black. The census of the United States divides the whole population into the white, the free colored, and the slave.

It would, doubtless, be interesting in this report to consider our population under all these heads, and learn the laws of life and disease as they are manifested in each class, especially in the white, the mulatto, and the black; but it is judged inexpedient at this time to extend the inquiry into all of these ramifications. In this report, therefore, the population will be regarded as consisting of but two classes, as at first mentioned. The free blacks will be classed with the slaves, because, although there are in that subdivision many very respectable persons, yet the great bulk are assimilated to the slave population in their tastes, habits, and social relations infinitely more than to the whites. Indeed, they are generally esteemed below the slave. Notwithstanding it is considered important that this report should be short, it is yet judged advisable that the condition of the colored population as to health, longevity, fecundity, etc., should be indicated as compared with the white. To facilitate this comparison, the white and the colored population of each county are included in the table.

This is a comprehensive table, and is intended as the beginning of a series of observations from which we may learn something of the comparative fecundity, health, and longevity of the two races among us. It shows—

1. The number of white births, male and female, in each county in the State as returned by the assessors.
2. The number of colored births also, divided as to sex.
3. The number of marriages as returned by the assessors, and also the number of licenses for marriages issued in each county during the year 1852.
4. The number of deaths among the whites, divided as to sex.
5. The same facts as to the colored.
6. The proportion of births to the white population.

7. The proportion to the colored.
8. The proportion of marriages to the whites.
9. The proportion of deaths to the whites.
10. The proportion among the colored.
11. The proportion of deaths to the whole population.
12. The average age of the white and of the colored at death.

From this table it appears that the white race is something more fruitful than the colored, in the proportion of 1 in 38 to 1 in 40. Whether this is real or apparent is uncertain, as it is thought that, in the enumeration, births among the blacks would be more apt to be forgotten than among the whites.

This table also gives us the number of marriages returned from each county, and also the number of marriage licenses issued in each county. The list of licenses was procured from each county as a means of judging of the completeness of the assessors' returns, not only of marriages, but of the other schedules. It will be observed that, though in some cases the assessor has returned more marriages than the clerk returned licenses, yet the reverse is usually true to a very considerable extent.* Indeed, it is thought highly probable that the assessors' return of marriages are more deficient than the other schedules. It would, at first sight, seem strange that, in any instance, the assessor should return more marriages than the clerk did licenses. In looking into the schedules that is partially accounted for by entries, showing that divers marriages had been entered into in other States, upon which particular counties bordered. But the same discrepancy occurs in other counties in the interior of the State, where this solution (at least to the extent necessary to solution), could be admitted.

In estimating the proportion of marriages to the population, the number of licenses has been the basis. Where the clerk of the county has not furnished that list, the number returned by the assessor has been substituted. According to these data, it will be seen that there has been one marriage for every 102.92 of the white population. Our laws recognize no marriage between the colored population, though a marriage ceremony of some kind is very generally observed among them.

From this table we learn something, too, as to the relative mortality of the two races. By examination, we find that the

* In Jefferson county the difference is thought no less than 716.

hand of death lies heavier upon the colored race. They die in greater proportion and at an earlier age. The proportion of deaths is 1 in 65.57, whilst of the whites, it is 1 in 76.03. This proportion, though greater than that of the whites, is yet greatly less than the mortality among the black population of Philadelphia, the only comparison which it has been convenient to make. By a paper on the vital Statistics of Philadelphia, published in *American Journal Medical Sciences* in 1848, the average mortality was stated to be among the black population for ten years (from 1820 to 1830) 1 in 21. And for ten years, 1830–40, 1 in 31—greatest mortality, 1 in $23\frac{1}{2}$, least, 1 in $38\frac{1}{2}$.

A question of some interest may be asked here: Is this greater mortality attributable to the race or to the social condition in which they are found? Is that class of population, by which the hard work of every community is done, as long-lived as those in easier circumstances? It is more difficult, perhaps to determine this point in free than in slave States. Yet is it one well worthy of reflection.

Again, this table reveals two facts which appear somewhat contradictory.

1. The proportional mortality is small, even allowing what would be thought a sufficient latitude for omissions by the assessors.

2. The average age at death is low.

This may be accounted for, if the census should show a large proportion of very young persons among us.

Without making any more comments upon this table, I will add that of 12,361 whose ages are reported 4,985, or 40.33 per cent., died under 5 years. This is about 1 per cent. more than those dying in Massachusetts of the same age. The proportion of those dying in advanced age is small, and yet 12 (2 white males, 2 white females, 2 black males, and 6 black females) over 100 are reported. The most advanced age was that of a white female 110. In Massachusetts the whole number of centenarians was five.

Being desirous to discriminate the relative degrees of mortality in different counties, as indicated by the registration returns, I thought it advisable to do so in connection with the geological formations of the State, as at present understood. For

this purpose I procured a copy of the map presented by Prof. Peter in his report to the Society, and have made spots upon it, which, without interfering at all with the geological delineations, will, it is hoped, indicate distinctly the relative mortality. The diamond-shaped spots, thirty in number, indicate a mortality of less than 1 per cent.; the triangles, twenty-five in number, indicate a mortality more than 1 and less than 1½ per cent.; the squares, thirty-four in number, indicate a mortality between 1½ and 2 per cent.; and the round, ten in number, indicate a mortality over 2 per cent. Meade and Powell counties are not marked, because Meade furnished an account of her deaths, which it was impossible to understand; and Powell having been created since the census of 1850 was taken, nothing is known of her population. If her population and mortality are merged with the three counties, Clarke, Estill and Montgomery, from which she was formed, the whole group will be characterized by a square.

All of which is respectfully submitted.

MATERIA CHIRURGICA.

By J. B. FLINT, M.D., Professor of Clinical Surgery, University of Louisville.

Much as has been written of late, and taught in other modes, respecting the use of "*water dressings*" in surgical practice, there still appears to be a great deal of misunderstanding on the subject in the professional mind, and a want of discrimination in the application of them, which materially impairs their value and estimation as remedial agents.

In most of our systematic surgical treatises, the reader will find very meager, and, comparing the various authors, very contradictory instructions on this most legitimate and beneficial form of "hydropathy;" and among the monographs and reports devoted exclusively to its consideration, I know not one that does any thing like justice to it, either as a philosophical or therapeutic topic.

It is due to that admirable work of Prof. Miller, of Edinburgh, the "Principles of Surgery," to refer to it as a signal exception to the delinquency attributed in general to our surgical text-books and authorities. That work is full of merit

in every chapter it contains; but never more meritorious than in the sound and discriminating views of the application of heat and cold, inculcated in the section relating to the management of inflammation. If the counsel and cautions there furnished respecting the use of "irrigation," had been more generally known and observed, we should have avoided many instances of disastrous results from its mis-application or maladministration, which have prejudiced the minds of practitioners against the whole system of treatment, of which it is, indeed, one of the most infrequently serviceable portions.

To those who know how large a share of my surgical therapeia for the last twenty years, has consisted of these appliances, it will not seem presumptuous in me to occupy a few pages of the "News" with an exposition of the merits of this great amelioration in the practice of our art, and of the methods and details necessary to secure the greatest amount of advantage from its employment.

The gentlemen who, in successive years, have attended my clinical lectures in the "Louisville Marine Hospital," will find in the following remarks, a reminder—I trust not an unwelcome one—of what they have repeatedly heard and seen in the course of those exercises; and I may be permitted to invoke the recollections of those gentlemen in testimony to the demonstrations there afforded of the signal alleviations and benefits of the "water dressings" in the various forms of external disease in which they were there employed.

Water in some one of its forms, is employed by the surgeon in so many of the exigencies of his calling, that even to specify all the occasions of its use, would require a longer article than I intend to offer to the readers of the "News" at this time. Let us confine ourselves therefore, for the present, to a consideration of its *topical application to wounds and external inflammations.*

In these affections, each of the three physical forms, as I suppose they may be termed, of this substance, is at times, the most eligible of all topical applications—*ice*, *water*, *vapor.*

Ice.—With many European surgeons, this agent is a favorite and exclusive application, in the gravest forms of recent injury—compound fractures, gun-shot wounds, &c. The tissues involved in these injuries are brought to a temperature

a little above the point of congelation, and maintained there persistently for many hours or days. Persistency is an indispensable condition of the advantages to be expected from the treatment. Any remission is liable to be followed by excessive reaction which, although it may be prevented by the ice, can not so effectually be subdued by it. The period during which it is necessary to continue the frigorific agency varies, of course, and must be determined in every case, by the judgment of the surgeon. The intention, however, always is to maintain the repressive force of the cold until the disposition of the tissues to inflammatory re-action is completely overcome—or, to employ the metaphorical style of John Hunter, until the tissues have forgotten or lost their resentment. I have no personal experience in this employment of the element—I speak under correction of the chemists—whose uses we are now considering, having found another and antagonistic method of dealing with the injuries referred to, so satisfactory in practice, that I have never been tempted to exchange it for its vaunted antithesis. The French surgeons who treated the wounds of their countrymen who suffered in Paris, during the conflicts of the last revolution, furnished reports of many extraordinary recoveries under this treatment, as did also their brethren, who found ample opportunities for testing its efficacy, in the surgical service of the Crimean war. The surgeons of the late Italian campaign have not contributed much, so far as I can learn, to our information on this interesting point of practice.

Water.—In this ubiquitous fluid, we have a surgical medicament of unquestionable value—known and commended as such from the very earliest period of rational medicine. Always at hand—costless, cleanly, agreeable—the surgeon can not prize it too highly, nor interest himself without profit, in whatever relates to its efficacious administration.

In the affections contemplated in our present remarks, it is used of various temperatures; but generally with a view of its acting as a refrigerant. There is no very precise difference between cold and tepid water, as the terms are used in this connection, but it is exact enough to regard *cold water* as that the thermometric measurement of which is between the freezing point and the temperature of the atmosphere around us, and *tepid water* that which stands as any degree between that tem-

perature and the boiling point. When we apply *cold water*, or cold water dressings, the refrigerant effect is immediate and obvious, but often attended by shock or chill which inevitably entails more or less of the inflammatory re-action which we are endeavoring to counteract. The *tepid water*, on the other hand, as it evaporates, gradually abstracts the abnormal heat from the surface to which it is applied, without any violent or offensive influence either upon the vascular or nervous tissue of the part. It is often a difficult point of practice to determine which of these methods is preferable, in any particular case. There are certain stereotyped directions of the "masters," to be sure, by which we are taught that incipient and superficial inflammations, should receive the cold water dressings, and that those which are profound or chronic do better under the tepid; but there are so many exceptions to this generally judicious counsel, that almost every case of difficulty is remanded to the judgment, or experience or *experiment* of the practitioner. The latter is often the best, or only safe guide. Failing in any "a priori" reason of preference, we try the two methods in succession, and are determined, either by the sensations of the patient, or by the obvious results of the application, with which we shall persevere. In no section of practice more than in that which comprehends the treatment of the various opthalmiæ, do we need some more definite rules than we possess, for a discriminating use of these antiphlogistic agents, taking the place, as they must do, of many heroic collyria that are fast passing into deserved oblivion. I will not presume to attempt a complete response to such a desideratum; but there are a few points, respecting which my experience has been so uniform and considerable, that I am confident its communication cannot greatly mislead any practitioner who may be inclined to carry its suggestions into effect.

Almost all instances of *acute conjunctivitis*, whatever be its cause or nature, are benefitted by the cold water dressings. The same is true also of that imperfectly understood affection of the conjunctiva which we call "scrofulous opthalmia." I have watched very carefully, the effects of the two methods, in a great many cases of this disease, and am convinced that in a large majority of them, the photophobia diminished, and the general irritation of the organ subsided, far more certainly

and speedily under the *cold* than under the *tepid* water dressings. On the other hand, I can hardly remember a single instance in which the *sclerotic coat* was, either primarily or secondarily the subject of inflammatory disease, in which the cold water did not appear to aggravate the symptoms, while the tepid or vapor dressings as universally alleviated them, and evidently promoted recovery. In all the deep seated inflammations of the eye—those involving the iris or retina, I have observed that, so far as we could attribute a modifying influence of a salutary kind, to any local applications or measures, nothing seemed to be so efficacious as these same tepid fomentations and steamings. Moreover, in that most superficial of all the opthalmiæ, which attacks the edges of the lid, and is so frequent and intractable, better than all leechings, and scarifications and cataplasms, is spongio-piline, or some of its familiar substitutes, as preparatory to the application of those alterative substances nececsary to the eradication of the disease.

In respect to traumatic affections, in all parts of the body, we shall find that a large portion of them will do best under the cold water, as a primary dressing. Especially is this true of *contusions*, where it not only suppresses the further effusion of blood from the wounded capillaries, but seems to alleviate, as nothing else will, that aching or depressing pain which is characteristic of such injuries. With a view to the same advantages, a light compress moistened with cold water, will be found to be the most eligible primary dressing for ordinary gun-shot wounds.

Vapor.—The triumphs of steam in the hands of the mechanician, are universally known and extolled. Let it be pardoned to an enthusiasm in its behalf, which cannot be contemned as youthful, but which is the product of a tolerably large and varied experience, if it seem extravagant in me to say that as signal a triumph awaits the same agent—used rather as a regulator than a force—in the hands of the surgeon, in the mastery it will aid in securing to him over the most frequent and formidable adversaries to be encountered in his professional warfare. When we consider how much of his care and efforts are devoted to affections which are, either essentially or by complication, inflammatory, and remember with what an incongruous array of topical remedies the empiricism and dogmatism of past times have combined to encumber this branch

of therapeutics, it is not easy to overrate the importance of a rational and adequate substitute for them all, such as is furnished in the *aqueous vapor.*

That this is indeed such a substitute, the evidence has now reached the point of demonstration. It would not comport with the purpose, much less the dimensions of this paper, to recite the details of this demonstration; and it would not be easy to obtain the materials for the favorite, but delusive, method of recommendation by statistics. Nevertheless, I cannot refrain from referring to a few particulars in the mass of accumulated evidence, rather as specimen cases, than as constituting, by themselves, any very conclusive testimony on the subject they elucidate.

Case. A fireman was assisting to raise a ladder, the lower extremities of which were armed with sharp iron pikes, five or six inches long, and an inch in width at the tip. His foot slipped too far forward, and as the ladder was planted upon the ground, one of the pikes fell upon his instep, transfixed his foot, and pinioned him to the earth. He was immediately extricated and taken to his home, where I saw him about half an hour after the accident, writhing in pain, and pale and shivering from the shock. A large well-worn towel was wrung out of hot water, and wrapped around the foot, covered with dry ones to prevent evaporation until some impermeable covering could be procured, and a messenger immediately dispatched to the druggist for some laudanum. Before his return however, the patient was so much more comfortable, that no opiate was administered, nor was any medicine whatever required, during the treatment. The "vapor dressings" were steadily persevered in for about a week, during which time the patient had no suffering, and was, with difficulty prevented from using the limb. At the end of that time, the foot was entirely free from pain, discoloration and swelling, the apertures of the wound were nearly closed, and a few more days of rest sufficed to make the recovery so complete that the patient returned, without any lameness, to his usual occupations.

Case. Five or six years since, I was summoned, by a medical friend, in one of the suburbs of the city, to visit with him a person who had just received a gun-shot wound, and the messenger was charged with a request that I bring my ampu-

tating instruments with me. A large pistol ball had struck the patella, about its center, at right angles to its surface, and had traversed that bone, and buried itself either in the head of the tibia, or in one of the condyles of the femur. The patient complained of but little pain, although the phenomena of the shock were very strongly marked. There was but little hemorrhage from the wound, but a copious discharge of synovia. The knee was carefully enveloped in the vapor dressings, which were assiduously applied, between two and three weeks. During that time there was considerable uneasiness, at times, in the articulation, but never any severe pain. When it was thought prudent to remove the dressings, the joint was free from pain, discoloration, tumefaction or anchylosis. The aperture of the wound was nearly closed, and, after wearing a splint, to determine rest of the parts, for a week or two more, the patient resumed his wonted active habits of life, and I frequently meet him on the street, having as unimpaired a locomotive apparatus, as any of his fellow travelers.

In neither of these cases was there any suppuration, inflammatory action being completely suppressed by our local antiphlogistic, and in both instances, the solution of continuity disappeared, under what has been called—not very significantly I think—the "modelling process."

Instances of this method of reparation, with all its attendant advantages of freedom from thickening and adhesion of tissues, and from cicatricial embarrassments, are frequently observed when wounds—even very serious ones—are treated by the "vapor dressings," but seldom or never do they occur under any other topical application.

The two cases I have sketched, are examples of the gravest kind of injuries. I might multiply them to the same effect, very considerably, without going beyond the limits of my own experience. They belong to that class of cases, which, as I have already said, many eminent surgeons would prefer to treat by the application of ice, their actual treatment having been according to that better method, as I esteem it, to which I adverted at the same time—the better method having long before commended itself to me not less by the actual results of practice, than by the consideration that in all my dealings with disorderly tissues and functions, it has generally appeared that,

like moral agents, they are more easily regulated by coaxing than by coertion.

A series of experiments with the water or vapor dressings took place a few years ago, in this city, which, in their aggregate, were conclusive as to their value, if no other evidence of it was at hand. They were conducted under the discriminating eye of an eminent practitioner* who no longer lives, except in the memory of his friends, and in a representative of his name and vocation, who, with added accomplishments, maintains the high professional character of his sire. In the immediate vicinity of his dwelling, was a factory, full of machines provided with revolving points and blades, and tended for the most part, by juvenile operatives whose carelessness and inexperience often brought their hands into contact with the truculent projections of their mechanical colaborators. The sufferers were generally taken immediately into the office of the gentleman referred to. Few days passed without one or more of these patients demanding his services. Their wounds were all of the punctured or lacerated class, and in severity represented every degree, from a mere excoriation to that which involved the partial or complete dismemberment of fingers and hands.

Hundreds of these cases were thus brought under his care; and after the irregularities of the wounds were smoothed off, the cold or lifeless shreds, or larger masses, removed, and the divided or dislocated ones replaced, no topical treatment was employed for any of them, except that master antiphlogistic and vulnerary, whose triumphs are a signal refutation of the cruel old aphorism of our art—"*dolor medicina doloris.*" Most of his patients made a painless and speedy recovery, and in none of them, where his injunctions were faithfully observed, did he encounter the diffused cellulitis, the erysipelitous complications, or the tetanic accidents so frequently attending such injuries, when treated by depletion, discutients, cataplasms, &c., in *more canonico* of former times.

Is it asked now, as it often has been, by certain philosopical persons who seem afraid of being too credulous on the subject, "in what manner does the vapor dressing act as an antiphlogistic?" What pathological or therapeutical principles are

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* The late Dr. Coleman Rogers.

involved in its felicitous agency?" In all candor it must be submitted, that the inquiry could be answered far more satisfactorily, if the interrogator could define to us, in the first place, more explicitly than any of the masters of pathology have been able to do, what inflammation is. Given a certain known force, in what manner does a certain other known force counteract it? This is a form of problem challenging complete solution; but I need not say that none of the explicitness of its first term can appear in the corresponding member of our supposed interrogatory proposition. Even in the imperfect state of our actual knowledge, on the subject of inflammation, however, sufficient explanations of the results referred to, suggest themselves, to render that an "a priori" probability, which is really a demonstrated fact of experience.

The immediate and essential therapeutic action of the *vapor dressings*, seems to be of two kinds; exercised in the one case, on the capillaries, and in the other upon the nerves of the affected part. The crowded and burdened vessels are relieved, by the relaxation of their parietes, and by the discharge of the fluid part of their contents which takes place in the induced diaphoresis. How often have I applied this simple medication to the dry and angry surface of a recent erysipelas, and found, after a few hours, that surface covered with a genial moisture, only in part derived from the dressing — chiefly indeed, the product of a depletion, the necessity and measure of which have been determined, as it were, by the intuitions of the vessels themselves, rather than by the uncertain judgment of the practitioner.

But the most material and characteristic "modus operandi" of the water dressings, as an antiphlogistic, is manifested by the modifications they effect in the action or passion of nerves. Few things are so soothing to these organs, when injured or irritated, as combined warmth and moisture. Evidences of this are continually presenting themselves to us, in occurrences of common life, as well as in medical experience. A simple foot bath will often exercise such a tranquilizing influence upon the whole nervous system, that a patient will at once fall into refreshing sleep which has been solicited in vain by the administration of opiates. The enervating effects of their warm baths upon Oriental people are well known, as well as the fact that the

sedative effect upon the nervous system of a prolonged submersion in tepid water, is often such as to induce complete syncope.

The first link in the chain of morbid phenomena constituting inflammation, so far as we know, is *pain* or some *nervous passion* of the affected part. Or, in another view of the subject, here, if any where, is to be found that "*ignis fatuus*" of the pathologists, "the proximate cause of inflammation." Break this primary link, remove this essential cause, and you do more to arrest the disorder, than by dealing never so wisely with any or all the subordinate processes. Therefore, in soothing the wounded or offended nerves, you are laying the axe to the root of the tree, instead of attempting its destruction by sapping its nutriment, or dismembering its trunk.

I here assume a doctrine on the subject of inflammation, which I am aware, is not universally accepted, but which I am equally sure is rapidly commending itself to the judgment and conviction of the profession. It is absolutely fundamental, however, to any adequate explanation of the results, so frequently witnessed, of the treatment of wounds and inflammations by the water dressing. Perhaps it will appear in this, as in some other instances, that our pathology is to be rectified by our therapeutics, and that practice is to verify theory, instead of being suggested or established by it. It would be foreign to the purpose of this paper, to enter upon any further examination of the doctrine here; but if any reader should desire to pursue the consideration of it with the aid of a far more satisfactory exposition than I could, under any circumstances, furnish, let me commend him to the comprehensive treatise of Dr. James Macartney, to whom belongs the honor of having led us in the only step we have taken on the subject of inflammation, in a truly practical, therapeutical sense, in advance of the opinions and precepts of John Hunter.

It only remains to offer some practical hints upon the best modes of applying these dressings, and on the material to be employed in their administration. An effective application of vapor may be made, by conducting the distillation of water near to the patient, in such a manner that the product can be carried in tubes, or under some retentive covering, and applied directly to the diseased or wounded parts. But we more frequently employ it in its nascent state, as the chemists would

say—and I have sometimes thought that there may be some unconsidered advantage in this—as it is exhaled from the moisture contained in the meshes of some spongy or porous substance in immediate contact with the diseased part. The "spongio-piline," and some kindred articles manufactured for this special purpose, are elegant contributions of the textile arts to the apparatus of the surgeon; but are really no better than such as he can extemporize almost any where. In the more inconsiderable cases, a fold or two of patent lint, thoroughly moistened with hot water, are pressed or wrung out and quickly laid upon the diseased surface; a piece of oiled silk is immediately, but lightly, placed over it, and the dressing is complete. In other instances, an old linen towel that has become soft, pliant and porous by use, may furnish a convenient medium for the humid exhalation. A fold or two, or more, as the case may require, of new, soft, clean flannel, is a very eligible vaporizer for such purposes. Whatever substance is used as a medium, it must be applied as hot as the sensations of the patient will permit, and as dry as it can be made by hasty but energetic wringing. In preparing the lint for a dressing, no little patience and tact are required to affect its absorption of water, so as to be thoroughly wet. If the process be hastened by pressure, the meshes which are to contain the water, become obliterated, the fabric becomes consolidated, and to the same extent unsuitable for the purpose. If the water be allowed once fairly to insinuate itself, by capillary attraction, into the interstices of the lint, they are not afterwards collapsed by the severest pressure, but the substance maintains its light and porous character.

For the purpose of retaining the vapor, as it is exhaled, the outer covering of the dressing is of a material impermeable to that substance. We commonly employ either oiled-silk, or India rubber cloth—the former when the surface is small, and the latter when it is large. The latter has an odor of its own, which is unpleasant to many persons, and it should therefore, not be used on parts of the person where it will be likely to offend the olfactories. This covering should be somewhat larger than the epithem, so as to extend some distance beyond its edges. It should not be bound tightly down, but held in place by some ingenious adjustment or confined by tapes, only snugly drawn.

No particular, in the details of the antiphlogistic medication we are considering, is more essential to its successful administration, than the careful expression of all superfluous water from what ever substance is used as the means of evaporization. We can not too explicitly insist upon the understanding that it is not the application of *water* that we prescribe, but *the vapor of water*. Disregard of this distinction, not only defeats, in whole or in part, the purpose of our dressing, but often inflicts new inconvenience or suffering upon our patient, by provoking the irritation—sometimes even pustulation of the surface, so liable to result from the prolonged application of water thereto, under any circumstances. This result is the *crisis*, which figures so largely in the technicals of the hydropathic empiricism, and which the victims of the delusion are taught to believe to be the "peccant humors," brought to the surface by the searching and purifying draughts with which their stomachs are deluged and debilitated. No such irritation is ever found to result from the indefinite application of aqueous vapor, to any portion of the integument.

An estimable lady, as ingenious as she is assiduous and gentle, in attentions to her sick friends, exhibited to me, a few months since, an improved method of preparing the epithem, in warm water or vapor applications. The folded flannel, of proper dimensions, is to be wrung out of cool or tepid water, and being spread out on a firm surface, the heated flat-iron of the laundress is moved over it till it becomes a receptacle of hot moisture, the nurse or attendant being thus spared the scalding and hurry attending this portion of duty to the sick, when performed in the usual way.

One of the most common mistakes respecting the practical use of water dressings, consists in confounding their action with that of poultices.

Practitioners often direct their patients to apply warm water dressings *or* poultices to a diseased part. Now, it is frequently the case, that either of these applications may be used with a common advantage, but as frequently is it the case that the intention of treatment can only be answered by one of them. When suppuration is unavoidable, or as it sometimes is, desirable, no dressing will serve us so well as wisely chosen and well prepared poultices; while the antiphlogistic agency of the

vapor dressings, would be likely to keep down excited action below the suppurative point. It is only when we desire and design to prevent inflammatory action, or to diminish it as far as possible, if it already exists, that we rationally prefer the aqueous vapor, to any and every form of poultices.

In the foregoing paragraphs, Messrs Editors, I have prepared, according to promise, and with a cheerfulness which long familiarity with the subject, and a high appreciation of its importance are calculated to inspire, what may perhaps claim to be an epitome or summary of the doctrine and practice of "water dressings."

I hope to have done something to recommend these valuable resources of our art to a similar estimation in the minds of other practitioners, to that which they have long held in my own. Independent of their positive advantages, there is a negative one to which few can lay claim with better right than they. In the possibility which attends all our ministrations, that the agents we employ may not fulfill their intended beneficial purposes, it is a prime recommendation of any of them that they can not, in any degree, aggravate the pains or peril of our patients—and better still, if in addition to harmlessness, they are positively agreeable and soothing, realizing in the fulfillment of their curative purposes, two at least of the venerable therapeutic desiderata of our art, "*tuto*, cite ac *jucunde*."

CORRESPONDENCE.

October 14, 1859.

Dr. Hewett,—My Dear Sir,—

In the course of our meetings this summer, I mentioned to you that I had been considerably interested in the observation of quite a number of cases of trismas nascentium during the decade just now closing;—that interest has been augmented of late by the occurrence of three other cases in quick succession. You, if I remember correctly, promised to either mention it in the College of Physicians and Surgeons, or to a few of our mutual friends most largely engaged in the management of children, and give me the general result of their experience.

Lest you may forget it, I send you this reminder, and mention one or two facts connected with the cases which seem to me not a little curious.

1st. In a practice of ten years in Henry county, during which time my obstetric cases were not less than an average of thirty annually, I did not see a case of the disease, whilst in ten years here, with an average of fifty cases per year, I have had seventeen cases of trismus.

2d. And most curious, my ordinary circle of observation is about ten miles in diameter. The locality in which all the cases have occurred, constitutes an oblong of about four miles in width and six in length, situated nearly in the middle of my field. Outside of this district I have not seen a case, and have not heard of one.

For twenty years or more the negro children born within this boundary have been quite subject to the disease. Several farmers who owned large families of slaves, raised but few slave-children between 1830 and 1845. They would say, "We cannot raise negro children; they all die with the nine days disease." About that time an old woman of the neighborhood was the general midwife; and her professional duties were mainly restricted to the infected, or I should say, to the afflicted district. She lost cast, indeed, in her vocation, on account of the numerous cases that followed her deliveries. One of the oldest and most respectable physicians of this part of the country sought diligently for the causes of the old midwife's misfortunes, and confidently believes he found it. He says the old lady tied the cord so slack that its nerves were merely irritated, not deadened; hence actual traumatic tetanus. Whether his is the true explanation I leave you to determine; but if it is, Madam Griffith's successors, of whom I am one, have also tied too loosely. For following me, quite a number of cases have occurred. All the cases I have seen were not of my own delivering—indeed, the majority of them were not, for, charging double the fee of my professional neighbors, the majority of the slave labors fall into their hands; yet the proportion of cases under my sole management has been as great as under the management of either of my neighboring medical friends.

Every case has belonged to the African race. Many have been disposed to attribute the disease, therefore, to negligent,

ignorant, or careless nursing. At first I was inclined to adopt that opinion, coupled with the idea that a diseased state of the umbilicus, as abrasion, inflammation, irritation, or some other unhealthy condition was necessary to its production. But I was not long in satisfying myself that neither of these facts was constant. The children, a number of them, being nursed as tenderly, carefully, and cleanly, as a large number of the white children; and the navels, I have observed, have presented no constant indications. Some of them were well—healed up fully—others inflamed, indeed, in very varying and opposite conditions. Then I went off on the idea of persisting phrenal compression from some one of the cranial bones. In this view I was vastly strengthened by the announcement of the same idea by a gentleman of Tennessee, I think, who gave a number of cases, in which he thought it manifest, that the occiput increased the pressure, and that the compression was kept up by laying the children mostly on the back. It is singular that I have forgotten this physician's name, for I remember I was quite grieved upon reading his paper that I had not published, when I first conceived the thought, and thus entitled myself to the paternity of the great idea.

But further observation has satisfied me that I did not lose much by dilatoriness. I have fully satisfied myself that compression of the brain, from persistent bony depression, does not always produce the disease.

The inquiry as to what the accidents of labor may have to do with it has also been raised.

I have not been able to find any thing constant in this connection.

I have seen it following tedious and quick, laborious and easy, difficult and complicated labors, about in the same proportion. Nor do I find in the nervous, muscular, secreting, respiratory, or digestive system, any premonitory signs.

Twelve out of the seventeen cases have occurred in the six months comprising the last half of spring, all the summer, and the first half of fall. Five have occurred in the other half of the year. It begins never earlier than the fourth day, or later than the eighth. Mean duration, about two days. I have had three recovery cases. I have attributed their recovery to full

feeding. The mothers drawing the milk from the breast, and feeding them full; and they are the only instances in which I thought sufficient nourishment was afforded.

Messrs. Editors:

I have thought that some of your readers might be interested in a few suggestions of mine on the subject of asthma, as met with at this place. I say as met with here, for, as you are aware, the term asthma, in its broadest meaning, has been applied to almost all cases of difficulty of breathing. It has been applied to those cases of dyspnœa, the result of tumors, abscesses, etc., within the cavity of the chest; and also to those caused by the dilatation of the air tubes, or vesicles; so, also, to those cases in which the blood is circulated imperfectly through the lungs, the result, perhaps, of some disordered state of the heart or blood vessels. But the term asthma is applied more commonly to those cases of dyspnœa in which the air tubes are supposed to be affected with a spasmodic constriction, or to those cases which are supposed to depend upon some disordered state of the nerves, either general or partial without any connection with any appreciable definite organic lesion. It is not, however, upon any of these causes of difficulty of breathing that I propose now to write, but upon that species of asthma which has come under my observation here. I will suggest, however, that this disease does not, in my opinion, differ a particle in its nature and pathology from a large majority of cases met with in other locations, and called by physicians generally, spasmodic asthma, or nervous asthma.

But before I proceed to speak of the disease, it may be proper for me to mention the fact that asthma prevails here to a very considerable extent—to an extent that is not, probably, equalled any where.

We have here a small town on an elevated situation, the country around undulating, and, for the most part, in cultivation. The whole face of the town and country is dry and beautiful, and, in every respect, calculated to promote health. In fact, with the exception of this asthma, Bardstown is one amongst the most healthy places in the State, and perhaps in

the Union. Yet, in this town, which contains about 2000 inhabitants, and the vicinity, to the extent of four or five miles around, there are above one hundred asthmatics, and I do not include those persons who are at times subject to a slight difficulty of breathing, but only those who have well marked paroxysms of the disease, and at times suffer violently. It is certainly very difficult to understand the causes of the great prevalence here of this disease—why those persons who have removed from other and neighboring portions of the country, never having had a symptom of the disease previously, should, upon coming to this town, suffer, from that very time, with these paroxysms of dyspnœa; and yet such cases are quite numerous.

Another important fact I would mention is, that asthma is here, so to speak, a new disease. Fifteen or twenty years ago the disease was scarcely known at this place. It may be answered by some, that asthma, being hereditary, may to a great extent account for the great number of cases met with here. But I am prepared, after a careful investigation, to say that I believe this disease is not susceptible of such transmission from parent to child—that it is not hereditary.

Excepting the unusual prevalence of the disease here, and it may be the causes that are concerned in exciting it, it does not, as I have said, differ, in my opinion, from the asthma which is met with in other parts of the country. In fact, these very cases here have been pronounced spasmodic asthma by some of the most distinguished physicians, and the same cases by other physicians of as great distinction and learning, have been pronounced to be nervous asthma.

For my own part, I cannot well believe that this dyspnœa, which is met with here, can be produced by a spasmodic constriction of the pulmonary air tubes. I cannot believe that those tubes have the power of contracting by spasm. In fact, I doubt even if those tubes possess any muscular fibre whatever, entering into their composition. It is true Profs. Todd and Bowman believed they had discovered within the structure of these tubes something resembling small muscular fibres, and, upon their supposition, the fact has been generally received, but the existence of such muscular fibres has, I know, been doubted. The fact that those tubes, the larger ones at least,

are formed of stout cartilaginous rings, would seem to indicate that they were not susceptible of nor intended to admit any contractible movement: and it seems to me if these tubes possess muscular fibre, and are capable of contracting and closing their calibre upon the application of stimuli, that the difficulties in the processes of respiration would, at all times, be exceedingly great, as irritating and stimulating particles are constantly being taken into the air tubes by each act of inspiration.

I am aware that Dr. Williams asserts positively that these tubes, as well as the whole pulmonary structure, possess the property of contractility. The experiments of that observer, and his conclusions arrived at by means of electrical chemical and mechanical stimuli applied to the dead and relaxed lungs, seem to me not sufficient to demonstrate the fact. That these tubes may possess the properties of contractility and elasticity to a small extent, is possible, but that they can, by any spasmodic or contractile power, close their calibre completely, or to any considerable extent, seems to me highly improbable. If they do not possess the power of contraction, then the theory of spasmodic asthma is clearly erroneous.

Nor will the situation and character of the country, nor the condition of those persons who suffer of asthma, justify the conclusion that they are here peculiarly subject to nervous diseases, and epecially to diseases of particular nerves. In a large number of asthmatics, their nervous system is apparently sound and healthy, and, in a great many instances, they are remarkable for their activity and energy, both of mind and body. It is true, that in some cases where the disease has existed for a considerable time, and the patient has suffered repeated and violent attacks of dyspnœa, there are many symptoms of a nervous character, but I think they are mere consequences or effects of the disease, and in no way concerned in its causation; they are only such symptoms as would result from imperfect respiration or aeration of the blood from any cause whatever. If, therefore, any of the nerves are in an unhealthy and disordered condition, it must be some of the nerves especially concerned in respiration, and that those asthmatics among us who have such sound constitutions, and such perfect health in other respects, should be subject in this particular locality to the dis-

order of a particular set of nerves, is exceedingly improbable.

This vagueness, then, and uncertainty as to the nature and pathology of the disease, will, I hope, exempt me from the charge of temerity in venturing to suggest my belief that this asthma is not produced by a spasmodic constriction of the pulmonary air tubes, nor by any nervous disorder, but is owing to some disordered state of the mucous membrane lining the air tubes, and probably the pulmonary vesicles also, by which the free entrance and exit of the oxygen and carbonic acid is hindered or prevented. Whether this disorder is mere active congestion, or whether it is subacute or chronic inflammation, with thickening, or, possibly, other changes in its condition, I am not able to say, as I have never yet had an opportunity of examining its condition after death. But that *that* membrane is the seat of the disease, and that the disease is of the nature I have indicated, is, in my opinion, quite probable. The whole of the symptoms and phenomena harmonize with that idea, besides it is more in accordance with reason and analogy to suppose that the various irritating and exciting particles which are brought in direct contact with the air tubes and vesicles by inspiration will produce disorder and disease of that membrane, than to suppose that it is some cause which, in some mysterious manner, is capabble of acting powerfully upon the whole nervous and muscular systems, or upon the nerves and muscles of a particular portion of the body. Moreover, the direct existing causes of the paroxysms of the disease are such as are well known to produce disorders of the mucous membranes. The power of cold, the sudden change in the state of the atmosphere from warm to cold, is a well known cause of congestions and inflammations of the mucous membranes in general, and of the lungs in particular. Again, certain agents which are known to produce irritation of the mucous membranes will excite asthma when taken into the lungs by those who are predisposed to the disease. And again, those remedies which have proved more beneficial than any others. are in general such as are used in catarrhs, croup, bronchitis, and all kinds of inflammatory diseases of the viscera in general, and of the lungs in particular.

So far as that class of therapeutic agents which are classed among the anti-spasmodics are concerned, every physician has

verified the uncertainty in the results arising from their use. In fact, we may well question the existence of a set of remedies which exert a specific control over spasmodic action, from whatever cause it may have originated. It would seem, indeed, quite possible that all the agents classed under this head are only indirect in their effects, and if they are mere relative agents, the class ought to comprehend almost every article of the materia medica. Moreover, the direct anti-spasmodics, so called, such as musk, castor, valerian, assafœtida, etc., are not usually relied on in the treatment of tetanus and other similar diseases, nor have I heard of their extensive and successful employment in asthma.

It may, perhaps, with truth be said that there are few diseases "that flesh is heir to," which are not better understood by the professor than asthma. This want of a thorough knowledge of the disease has, no doubt, resulted from the fact that it has not been a very common malady, and has seldom proved fatal. It has, however, produced great suffering here, and if I shall succeed in awakening the attention of some of your readers who are more capable than myself of conducting an investigation of this subject to some sure and certain result, I shall be gratified.

The direct or immediate causes which I believe to be concerned in producing asthma here, may form the subject of a future communication.

Yours very respectfully,

W. H. NEWMAN.

Bardstown, Ky., January, 1860.

Messrs. Editors:

It becomes my painful duty to communicate through your valuable journal, the demise of our oldest and one of our most esteemed physicians. I allude to Dr. Jno. L. Murray, who died at his residence in this city on the 19th December. Dr. M. was born in Virginia, in March, 1784, and was, consequently, when he died, nearly seventy-six years of age. While young, he removed with his parents to Kentucky, locating in the eastern part of the present county of Jefferson. Here he remained, until, arriving at the proper age, he commenced read-

ing medicine with Dr. Wm. Gault, then a prominent physician of Louisville. In the winter of 1806–'7, Dr. Murray attended lectures in the University of Pennsylvania, then adorned by a Rush and a Physick. This was long prior to a medical school in the West; indeed, the idea of establishing a western school had probably never entered any man's mind.

Philadelphia was the great center of medical learning, and thither resorted students from the extreme South, and from the far West. The medical classes at that day could boast some of the noblest young men of the country, and returning home fully impressed by the great teachers of medical science, they were prepared to take that high professional and social position which made them men of mark in every community. The subject of the present notice was a man of this class. Possessing a strong mind well stored with medical knowledge, winning manners, a large amount of energy and resolution, and ever conscientious in the discharge of his duty, he was well suited to the profession he had chosen.

Returning from Philadelphia, he located in Vincennes, then the capital of Indiana. Here he acquired the personal friendship of Gen. Harrison, the governor of the Territory, and through his influence obtained a commission as Surgeon in the U. S. Army. He was ordered to Fort Osage, and, remaining in active service in the army for three years, he resigned his commission and returned to Louisville, where he commenced the practice in 1811. By his promptness and skill, he soon gained the confidence of the community, and secured a large practice. He continued the active pursuit of his profession, till 1824 or '25, when, having acquired an independency for life, and his health becoming somewhat enfeebled, he permanently relinquished the profession. With the exception of our highly esteemed fellow-citizen, Dr. James Johnson, Dr. Murray was the last of our old city physicians who entered the service half a century ago, and perhaps survived every surgeon of the army who held a commission dating with his own. He was another of the old physicians who link us to those great names which first gave luster to the profession in our country; and it is with peculiar feelings of sadness that we see them, one by one, disappearing from amongst us.

Some ten years ago, Dr. M. was attacked with paralysis,

causing, since that time, constant and often intense suffering; but his almost insupportable afflictions were borne with heroic fortitude and humble submission. The writer, though very often visiting him, does not recollect to have ever heard him utter a murmur at his condition. His active and vigorous mind remained unclouded to the last hour of his life. Dr. Murray was faithful in all the relations of life; as a citizen, he was enterprising and reliable; as a physician, ever ready to face the storm for the relief of the suffering; as a parent, kind, indulgent, and affectionate. He had been, for many years, a member of the Christian Church in this city, and died, as he had lived, a Christian. L. J. F.

Pharmaceutical Department.

By THOS. E. JENKINS, Pharmaceutist.

Iodide of Cadmium.—This salt, which has been so extensively employed in photography, and which has lately given such satisfactory results as an external remedial agent, may be made after the subjoined process:

℞ Iodinii, - - - - ʒi.
Cadmii, - - - - ʒiv.
Aquæ Destil, - - ʒiv.

Granulate the cadmium by means either of a rasp, or by fusion and pouring into cold water. Mix the iodine and cadmium with the water in a six or eight ounce vial, and agitate briskly until combination takes place, which may be known by the froth of the liquid becoming white. Filter the solution into a porcelain capsule, and evaporate in contact with a few clean pieces of metallic cadmium, until a drop taken out on the end of a glass rod and placed on a cold glass or porcelain surface begins to deposit crystals, then remove from the source of heat and allow it slowly to cool. This salt, which is one of the most beautiful in chemistry, occurs in the form of mother-of-pearl looking plates, or six-sided tables, quite white and transparent, unalterable in air, very readily soluble, both in

water and alcohol, and consists of equal equivalents of iodine and cadmium, or of

Iodine,	- - -	69.46 per cent.
Cadmium,	- - -	30.54 " "

It is distinguished by giving the blue color with starch and chlorine water, and the characteristic yellow precipitate, in either acid or alkaline solution, with sulphuretted hydrogen.

From extensive and long continued trials of this salt in London by Dr. A. B. Garrod, we may be warranted in expecting very satisfactory results from its use. He was led to try this substance in his endeavors to find an agent containing iodine, which would be free from the objections urged against the iodinal preparations now in use. He says: "The *free iodine*, or iodine combined withe iodide of potassium, as occurs in Ung: iodin: comp: of the pharmacopœia, is frequently too irritating in its nature, besides which, its disagreeable odor, and the staining of the cuticle which it produces, are often very objectionable.

The simple iodide of potassium ointment as ordinarily dispensed, is gritty in character, often to such an extent as to render its application to delicate skins impracticable, and it not unfrequently becomes brown from liberation of free iodine. Now, although these inconveniences may be removed by proper management and care as to the purity of the drug, nevertheless I am disposed to look upon the salt, when mixed with fatty substances as not very readily absorbed by the skin, and consequently not well adapted to produce the local effects of iodine, which it is often so advantageous to obtain, for it must be remembered that iodine is not always used simply for its rubefacient or counter-irritant action.

The ointment of *iodide of lead* likewise possesses certain objectionable qualities. Although not irritant to the skin, still it stains the cuticle yellow. And again, I consider the long continued use of lead is undesirable, for we know that it is apt to induce many injurious effects when absorbed into the system—lead cachexia, colic, and various forms of paralysis, as wrist-drop, etc. These may occur even when very minute quantities are introduced, and such absorption might readily take place when the plumbic preparation is employed for any

lengthened period around diseased joints, or even enlarged glands.

I believe, however, that *iodide of cadmium* possesses all the valuable qualities of iodine, iodide of potassium, or iodide of lead, when applied externally, and at the same time it is free from the various noxious properties of these preparations. It forms a perfectly white and soft ointment, producing but little local action upon the skin, and appears to be readily absorbed when properly applied with friction.

Under the use of an ointment of this salt, in the proportion of one part of the iodide to eight of lead, I have witnessed, in many cases, enlarged scrofulous glands rapidly reduced to their normal dimensions, great relief likewise given in various forms of nodes, and have, also, in several instances, seen much advantage from its application to joints affected with chronic forms of inflammatory disease. It is externally applied in some forms of cutaneous disease—chilblains, etc. There is, beside, every reason to suppose that the absorption of cadmium into the system, would not be attended with any injurious consequences, as it appears to be closely allied to zinc in its action upon the animal economy."

Oxalate of Cerium.—*By Prof. Simpson, of Edinburg.*—Prof. Simpson, during the last few years, has made a number of interesting experiments with compounds of several rare and hitherto much neglected metals, with a view of discovering some new and useful therapeutic agent, and perhaps to establish the fact that there is nothing on earth but has its application in medicine.

His latest experiments have been made with the metal cerium, and have resulted in the discovery of a remedy of immense value in the treatment of the obstinate vomiting incident to pregnancy, and, according to his own statements, one which has not only proved successful and satisfactory in a very great proportion of cases, but one which has given entire relief in inveterate cases which resisted every other agent and mode of treatment.

We give below his own words, taken from the *Medical Times and Gazette.* In speaking at length on the subject of vomiting

in pregnancy, he says: "The drug I refer to is the oxalate of cerium, which I have seen successful in curing vomiting in a larger proportion of cases than any other single remedy which I have used; and its good effects are not confined to the forms of vomiting which depend on the sympathetic derangements of the stomach caused by changes, functional or pathological, in the uterus or other organs, but are manifested also in those forms of the disease which are due to different morbid conditions of the stomach itself. Cerium is, as you know, one of those rare and little known metals which were first discovered in the early part of the present century, and is found chiefly in the Scandinavian mines, combined in small proportions in various minerals. I believe that any of the other preparations of the metal would fullfil the indication equally as well as the oxalate, which is used simply because it is the most easily procurable salt of cerium in the market; oxalic acid being used to separate the cerium from the metal with which it is most generally combined in nature, namely, didymium. The action of cerium on the stomach seems to be that of a sedative tonic, resembling in some degree the action of the salts of silver and bismuth; and I have seen it succeed in curing the most obstinate cases of vomiting so much oftener, and so much more speedily than any other remedy, that I have come of late to have great faith in its employment. I would not lead you to suppose that by the administration of a quantity of oxalate of cerium you will succeed in curing every case of vomiting, or even in alleviating it in every case; but I am certain that you will find the remedy successful in a larger majority of instances than you will find any other one drug. You may give one or two grains of it, three times a day or oftener, in the form of a pill, or mix with a few grains of gum tragacanth, in the form of a powder. The vomiting usually ceases after a few doses have been taken; but in some cases it does not abate until the remedy has been persevered with for several days. The effect is sometimes instantaneous. I had a patient sometime ago from the west of Scotland, and when her husband first came to ask me to visit her I was engaged and could not go, but after hearing his account of the case, I gave him a prescription for cerium pills, which I desired him to administer to his wife till I could get to see her. He came back next morning, asking

what the medicine was which I had given him, for the effect of it had been like magic. The vomiting, which had been going on almost incessantly, and which nothing seemed to have any power of alleviating, ceased upon the administration of two doses of the cerium. In a previous pregnancy in this patient it had been made a question for a medical consultation whether abortion should not be induced, to save her from the effects of uncontrollable sickness and vomiting. But the good result is, unfortunately, not always so immediate. One of the earliest cases in which I employed it was in the case of a lady who came from Greenock, when she was pregnant for the fourth time, and had arrived to between the third and fourth month of gestation. For these three or four months she had been always vomiting many times a day, and often during the night also; and that when the stomach was empty or full. She could take but very little food, for she always sickened at the sight of it. It had been the same in all her former pregnancies; and on the occasion of the first of them the vomiting was so severe as to bring on a miscarriage, and the patient's own life was despaired of. She got, first of all, one grain of oxalate of cerium, but vomited three hours afterwards. She was then told to take a grain every three hours for a day, and afterwards one grain thrice a day. This was successful in checking the vomiting, and a few days afterwards she left Edinburg, feeling quite well, eating her meals heartily, and free from all sickness. Everything had been tried by different medical men in the West which afforded any prospect of relief, as creosote, prussic acid, bismuth, lime-water, ice, champagne, opium, blisters, etc., but all without effect. The only thing from which she ever experienced any benefit, and that was only very transient and temporary, was calcined magnesia. Yet, as I have told you, it required only a very few doses of oxalate of cerium to produce a perfect cure. Shortly afterwards I saw, with Dr. Craig, of Ratho, a case of severe and persisting vomiting in pregnancy, where he had tried every thing, but in vain. She, too, was cured by a few doses of cerium. When the propriety of entering this and other modern remedies in the new Pharmacopœia to be published by the Medical Council was lately debated, it was objected that so little of the drug is used that it is not worth while classify-

ing it among the other recognized medicinal agents. But on making inquiry lately at the drug shop of Messrs. Duncan, Flockhart & Co., in this city, I was told that they had sold as much as sixty-four ounces during the preceding twelve months, and I feel assured that it only requires to be more widely known to make it more extensively esteemed and employed as a general metallic sedative tonic."

We would here give a formula for the preparation of this medicine, but the rarity of the minerals in which cerium is found, and the consequent difficulty of obtaining them, together with the doubly difficult and elaborate chemical processes for eliminating the pure metal or its compounds, lead us to believe that it would not interest our medical friends. We will, however, compensate them by saying that the pure oxalate of cerium may be obtained from Messrs. Thos. E. Jenkins & Co., Chemists, of this city.

Iodised Glycerine in Skin Diseases.—*By Dr. Richter, of Vienna.*—This solution is prepared after the following formula:

℞ Potassii Iodidi
Iodini, - - a a ʒi.
Glycerinæ, - - ʒii.

Add the iodide of potassium to the glycerine, and when solution is effected add the iodine. A few minutes agitation will cause a perfect dissolution.

This solution has the great advantage over alcoholic solutions of not drying; in consequence, the surfaces remain supple, and the absorption and action of the iodine is much prolonged. It should be applied to the affected part and covered with gutta percha paper, to prevent evaporation and increase the perspiration of the part. It is left untouched for twenty-four hours, and the degree of reaction regulates its further application. The application of water will readily remove all traces of the solution. This solution occasions pain, which varies in intensity and duration according to the state of the diseased part and the sensitiveness of the patient. There has, however, never been any general inconvenience. On removing the application, the healthy skin has become brown and the diseased parts paler than before. On ulcerated surfaces,

no trace of iodine will be found two hours after its application. Sometimes its action has been so powerful as to produce phlyctene.

The results of Dr. Richter's experiments are, that this solution acts as a caustic; that it has really a heroic action in cases of lupus; that its efficacy is remarkable in non-vascular goitre, scrofulous ulcers, constitutional syphilitic ulcers—doubtful in primitive chancres and eczema, and useless in psoriasis.—*Wiener Med. Wochens-Schrift.*

To Prevent Falling Hair.—In many cases of this troublesome complaint, the following mixture may be used with advantage:

R Castor Oil - -	1 pint.
Alcohol, 98.00, - - -	1 "
Tinc. Cantharides, - -	1 oz.
Oil Bergamot, - - -	½ "
" Jessamine, - - -	½ "
Tr. Benzoin Comp. - -	½ "

M.

Apply to the scalp once every three or five days. Sometimes the tinct. cantharides may be replaced by double its amount of tinc. of horse-radish.

We copy the following from the "Druggist:"

The Responsibilty of Druggists.—Another of those sad casualties, fortunately of rare occurrence, by which life is sacrificed in consequence of an error in compounding drugs, has recently occurred in our midst. According to testimony given on the trial, a prominent physician of this city prescribed sulphate of quinia for a patient ill of intermittent fever. The prescription was "plainly written," as—according to the testimony given—all his prescriptions are, but by accident, the young man in attendance put up sulphate of *morphia* instead of sulphate of *quinia*. Two pills, containing three grains each, were taken, and the death of an estimable and widely known and respected lady was the consequence.

The establishment at which the medicine was put up ranks as one of the first in the city, and every precaution had been taken to prevent error in the substitution of those very articles for each other.

We do not propose, in this case, to draw a distinction between accident and culpable carelessness, but merely state the facts, and shall found an observation or two upon them.

1st. The young man who put up the prescription had been in the establishment about a year, and it is presumed that he ought at least to have known the difference between the names and positions in the establishment, of the drug prescribed, and that used, though it would seem that his experience as a compounder of medicines was not sufficient to trust him to make up prescriptions, except under the immediate eye of a competent person. We believe that the name of the drug prescribed was *dictated* to him in English, whereas, if the prescription which was written out in full "Quiniæ Sulphatis" had been before him, he would have been, we think, less likely to have committed the error.

2d. Druggists should confine themselves more attentively to their specific duties than is done by some of them, particularly among those known as "fashionable druggists." Many of them, in their anxiety to make money, sell fancy articles of various kinds, cigars and tobacco, besides other articles entirely unsuited to an establishment where medicines are prepared for the sick. With many of them, too, the trade in proprietary medicines is a much more important part of their business than that for which they profess to keep their establishment open.

If druggists would confine themselves more to their legitimate duties, fewer drug stores, and more perfumers and cigar dealers might be called for than exist now, but we believe that the public would be better served, and the knowledge and skill of the physician better supplied in the treatment of disease.—*Phil. Med. and Surg. Rep.*

Some of the daily papers are taking advantage of the late melancholy accident—death from poison by mistake of a druggist—to administer large doses of advice to druggists with regard to their manner of conducting business. There is perhaps no great objection to this, except that much of the advice is not at all to the purpose, and, "not to put too fine a point on it," silly. There are, it is true, some precautions that might be taken which are neglected by most druggists, and yet, even with the very greatest care and attention, mistakes will occasionally occur, and there is no more possibility of absolutely preventing accidents in this business than in any other. To a very considerable extent, the patients and their friends are to blame; sometimes also the physicians, for these unfortunate occurrences. There is a very considerable expense incurred

when all precautions are taken, and the public generally are not very willing to pay this, preferring to run a little risk, and trust to Providence, rather than pay an extra price for drugs. As soon as the community is prepared to sustain an establishment conducted in every respect in the best manner, then, and not before, men will be found willing and competent to commence and carry it on.

The formula for preparing the Hæmatic Capsules of M. Fay:—

℞ Arterial blood of calf - - 1 lb.
Phosphate of Soda, - - - 13 dr.

Mix thoroughly and make capsules of from 5 to 10 grains: ten to twenty capsules a day are given.

Ointment for Acute Inflammation of the Tympanum.—Dr. Kramer, whose excellent work on the special diseases of the ear is well known, extols the employment of the following ointment when inflammation of the tympanic membrane has not yielded to the action of antiphlogistics:

Tartar emetic, - - - - - 4 grms.
Simple cerate - - - - - - 8 "
Oil, - - - - - - - - - - 8 "
M.

This ointment is used by friction over the mastoid process. This measure is intended to prevent the organic alterations which ordinarily take place at this period of the disease.

In case the affection has passed into the chronic state, and gives rise to a slight otorrhœa, mucous or purulent, M. Kramer recommends aiding the action of the antimoniated ointment by the employment of simple injections, and then with solutions thus made:

Water, - - - - - - - 30 grms.
Sulphate of zinc or acet. of lead, - - 5 to 50 ctgrms.
Or Nitrate of silver, or bichloride of mercury, - - - - - - - 1 to 5 "

When the membrane of the tympanum is perforated he does not employ these injections except after blunting the sensibility of the mucous membrane of he tympanic cavity, by a tepid solution composed of—

Sulphate of potassa, - - 5 to 15 ctgrms.
Water, - - - - - 30 grms.

The physician ought always to perform these little operations himself with the end of suspending them if too great irritation supervenes.—*Bulletin de Therapeutique.*

Odontalagic Mixture of Tannin.—It is necessary to act in the following manner in diseases of the alveolar membrane: At first we should disembarrass the roots of the diseased teeth of a small layer of very hard granular matter which is deposited there by suppuration; a slender scoop is sufficient for this operation. We then prescribe for some days emollient mouth-washes to combat the irritation, and when that has disappeared, we order the tannin mixture:

Pure tannin, - - -	8 grms.
Alcohol of 86° - -	120 "
Tincture benzoin, - -	8 "
Essence of Mint, - -	2 "

Dissolve and filter. Mix a few drops of this liquid with water, which is used to wash the mouth two or three times a day.

The use of this remedy ought to be continued even some time after the cure, to consolidate. Under the influence of this energetic astringent the gums become firm, little by little the suppuration disappears, and the gums retake their normal state.—*Repertoire and Jour. de Chim. Med.*

Tests for Purity of Chloroform.—M. Bertha gives the following directions in the *Moniteur des Hopitaux:*

Chloroform may contain chloride of elaidine, alcohol, various chlorides, amylic and methylic combination, and aldehyde. By adding caustic potash to chloroform containing chloride of elaidine, the compound is transformed into chloride of acetyle, the fœtor of which is immediately noticed. In order to ascertain the presence of all the other compounds which may be mixed with the chloroform, especially alcoholic compounds, pound a small quantity of bichromate of potash in a little chloroform, and add to this mixture a few drops of sulhuric acid. If the chloroform is pure, a reddish-brown precipitate of chromic acid is formed; if not pure, the acid is reduced, whilst the precipitate, or sometimes the liquid itself, assumes a green color, dependent on the presence of the sesquioxide of chrome. —*London Lancet.*

Preservation of Microscopical Preparations.—The following mixture is proposed by Dr. Pacini for the preservation of

blood globules, of nerves, ganglions, of the retina, and of the white tissues generally:

℞ Protochloride of mercury, - 1 part.
Chloride of sodium, - - - 2
Glycerine, (250 Baume) - - 13
Distilled water, - - - - 113 parts.

For Drunkenness.—The true specific for drunkenness is the acetate of ammonia, which can be procured every where.

Numerous trials have demonstrated the efficacy of this salt. Here is the formula given by Mesuyer:

Sweetened water, - - 150 grms.
Acetate of ammonia, - 12 to 15 decigr.

A half dose more may be taken by those who have been entirely sobered by the dose of acetate of ammonia above indicated.—*Jour. de Chim. Med.*

Preparation of Citrine Ointment.—*By M. R. Croven.*—In general, authors prescribe for the preparation of citrine ointment, to simply melt the fatty substance, and when it is half cooled add the solution of nitrate of mercury.

In operating thus there is truly obtained an ointment of a beautiful citron color, but it does not preserve it but for a short time; in fact, it soon begins to whiten, and becomes finally greyish, a phenomenon due, as we know, to the continued reaction of the elements of the fatty matter upon the nitrate of mercury.

Some pharmaceutists, to the end of obtaining a better ointment, heat strongly the fatty mixture, and then the mercurial liquid; in this case the effervescence is very lively, a certain quantity of mercury is reduced as is proved by the greenish paste that is found at the bottom of the basin; besides it forms much froth, which, in spite of care, causes an overflow of the matter, and of which a part remains even to the end of the process, and is an inconvenience when it is desirable to run it in blocks.

I am convinced, by repeated experiments, that by maintaining the fatty matter melted for some minutes at a temperature sufficiently elevated to boil it slightly without burning, allowing it to become half cooled and adding little by little the mercurial liquid, an ointment is obtained free from the above mentioned inconveniences, and from the unpleasantness of coloring the fingers when handling it, and enjoying besides the property of retaining without alteration longer than the oint-

ment prepared by the ordinary method.—*Jour. de Pharmacologie* and *Jour. de Chim. Med.*

Solid Perchloride of Iron as a Styptic.—In a recent communication to the *Medical Times and Gazette*, Mr. J. Z. Lawrence called attention to the powerful local styptic properties of the solid perchloride of iron. In the same journal of August 27th, he proposes a superior method of employing it. "If the solid perchloride of iron be kept in a bottle, a small portion of it, after a time, deliquesces into a thick brown fluid, which is kept in a constant state of super-saturation by the undeliquesced portions of the salt. This liquid, applied by the means of a spunglass brush to a bleeding surface, arrests the bleeding almost instantaneously."

Mr. L. recommends this method of application especially in excision of the tonsils, bleeding from the deeper seated gums, etc. He has never known inflammatory action to follow the use of the solid perchloride.

Transformations of Protochloride of Mercury.—*By M. Berthe.*—From the author's experiments it appears:

1. That under the influence of an elevation of temperature, and especially in the presence of alcohol and water, protochloride of mercury is decomposed, giving rise to a certain quantity of bichloride.

2. That Smithson's battery, in contact with calomel suspended in water, produces the same reaction, and that therefore whenever it is desired to deprive calomel of the bichloride which it may contain, or to prove the presence of this salt in it, the liquids (water, alcohol, and æther) must be employed at the temperature of the atmosphere, and that before making use of Smithson's pile the limpidity of the liquid must be ascertained.

3. It may be deduced from these experiments, that if a continued temperature of 104° to 122° Fhr. be sufficient to cause the partial conversion of protochloride of mercury into bichloride, it is scarcely doubtful that this must take place in the organism when it is eposed to a temperature near this in presence of alkaline chlorides. This is a further proof of the opinion put forward by Mialhe as to the mode of action of this compound.—*Comp. Rendus.*

Aristocratic Recipe for the Itch.—M. Bourguignon, its inventor, states that the ointment has a pleasant odor, and effects a certain cure after a single friction:

℞ Yolks of eggs, - - - - - - - 2;
Essence of lavender, citron, and mint, of each, 5 grammes;
Essence of canella and clove, of each, - 8 grammes;
Gum-dragon, - - - - - - - 2 grammes;
Sulphur, well pounded, - - - - 100 grammes;
Glycerine, - - - - - - - 200 grammes;

Mix well the essences with the yolks, add the gum-dragon; then to the mucilage add very gradually the glycerine and sulphur.—*Med. Times and Gazette, Oct.* 29, 1859.

Our readers will please contribute all aid in their power to Dr. Dougherty's object as expressed in his circular:

Dear Sir:

Having had, at the meeting of the American Medical Association last spring, the duty assigned me of making a report on the subject of *Tracheotomy in Croup*, I take the liberty of asking your co-operation.

Have you had cases of this sort, and if so, what have been their history and issue? Can you give me the name and address of any gentleman, in your neighborhood, who has had such cases?

An early answer will greatly oblige

Yours, respectfully,

ALEX. N. DOUGHERTY.

Newark, N. J., Dec. 10, 1859.

REPORT OF THE EASTERN LUNATIC ASYLUM OF KENTUCKY FOR 1858–'59.

We extract the following remarks by Dr. Chipley in this interesting report:

The rapid filling up of our asylum has given rise to the opinion that insanity is largely on the increase. This is not peculiar to Kentucky. Similar institutions almost everywhere are crowded; and both in this country and abroad the authorities are enlarging the old or erecting new ones. There is undoubtedly some absolute increase of these melancholy cases, but its magnitude is perhaps more apparent than real. The increased comforts of modern institutions for the insane, the general adoption of the non-restraint system, except in extreme

cases; the mild and gentle treatment which is found to be most successful in restoring the afflicted, and the diffusion of intelligence among the masses in regard to these matters, have drawn hundreds from the dark and loathsome hiding places where they were immured, rather than commit them to asylums, where, it was believed, the most horrible scenes of cruelty were practiced for the purpose of restraining the wayward manners of the violent.

Another cause for this apparent increase is due to the augmented longevity of the insane who enjoy the comforts of modern asylums. This is declared to be the fact elsewhere, and, I am happy to say, that statistics show it to be true in this institution. Thirty-five years ago the average age of all who died here, for a period of four years, was less than thirty-seven years, while for the last four years the average was over forty-two years. Here is an absolute gain of five years in the duration of life, and it is obvious that an effect of it is to swell the number of living lunatics.

But after making due allowances for these and other causes of fallacy in comparing the present with the past in regard to the proportion of lunatics to population, it must be admitted that there is also some absolute increase of the malady. It would be unreasonable to expect man to mingle in the active busy whirl of the present century, so different from the past, with almost every mode of thought revolutionized by the wonderful discoveries of the present age, without some victims to the spirit it inspires. There is no rest; we must imitate the power of steam and the velocity of the electric telegraph. There is no time to lose, and all must hasten forward. In education our children must be pushed to learned degrees at an age when our fathers had not ventured to peer into the first rudiments of classical literature; and our young men must accomplish in a day that for which their noble ancestors would have willingly struggled a score of years. All is haste, and neither our duties, pleasures, or even our devotions, are wholly free of it. In the race some must fall, and many of these go to swell the number in our asylums.

I have no means of knowing precisely how many lunatics are in the State. If we base our calculations on the ratio to population, which obtains in Massachusetts, where alone this matter has been thoroughly investigated by a commission appointed by State authority, there are in Kentucky, at this time, over 2,000 lunatics, and nearly 1,000 idiots. The number of lunatics would be materially lessened if early and efficient treatment were resorted to in all cases. It is a matter of economy as well as of humanity to make ample provision for the care of the insane, and to place the asylums on the very

best footing as to convenience and comfort, so as to induce an early application for admission in all cases. At least nine tenths of all who are brought to the asylum in the early stages of the disease recover, while scarcely five per cent. of those who are detained at home for a period of twelve months are restored. In the first case, the State is relieved of the burden of supporting the patients in an average period of about five months, and a useful and productive member is restored to society; in the latter case almost all remain for life, dependents on the bounty of the commonwealth. Very much has been said on the importance of early treatment, and many appeals have been made to friends to bring the unfortunate victims of insanity to the asylum without delay; and the State has even offered a pecuniary consideration to one class of her citizens for promptly placing their friends in the institution provided for their reception. But the most effectual plan for accomplishing this purpose is to make asylums what modern experience shows they should be—surround them with every possible comfort and convenience—remove as far as possible every thing which gives the repulsive aspect of a prison; supply to the naked and cheerless chambers such furniture as will minister to the comfort of the patient; afford the means of varied amusements and recreation; give variety of food, well cooked and neatly served; let every thing, without and within, be so ordered that the truth may impress every visitor that a lunatic asylum is no longer a mere prison—a place of pains and penalties—but an institution where gentleness rules and seeks by every means to lure its inmates back to reason, and then there will be far less reluctance on the part of the public to commit their unfortunate friends to early treatment. Much has been done within the past two years to bring this institution up to the modern standard, and all may be assured that we can now give those confided to our care far more comfort than can be had in any private house, under the care of those who have no knowledge of insanity. * * * * * * *

Several persons have been committed to the asylum accused of crimes supposed to have been perpetrated under the influence of insanity. Of this number was one reported in the foregoing table as "not insane." An inquest was held—the jury found the prisoner "of unsound mind," and the court very properly ordered him to be conveyed to the asylum. A single day's observation convinced me that he was malingering, and, after detaining him a sufficient length of time to confirm the opinion beyond all doubt, the prisoner was redelivered to the sheriff of the county where the felony is alleged to have been committed. He is now in jail awaiting his trial at the next term of the court. As one jury found this individual "of un-

sound mind," it is highly probable that, if he had been put upon trial for the crime charged against him, he would have been acquitted on the plea of insanity, and thus he would have escaped the just penalty of the law.

Since this report was made up another person, acquitted of the crime of murder on the plea of insanity, has been committed to the asylum, and discharged therefrom on a writ of *habeas corpus*, after a detention here of only one week. I have reason to believe that this person never was of unsound mind, and that he escaped the rendition of a verdict on the merits of the charge only by the vicious and imperfect method of investigating this plea. A fair and reasonable opportunity for examination by experts would probably have given a different result.

The plea of insanity is becoming alarmingly frequent, and many are suffered to escape under its cover the punishment due to crime. It is so, and it also frequently happens that persons are punished whom disease has rendered irresponsible for their acts, and who ought to be placed where proper treatment may be applied while society is protected. It is in behalf of these unfortunates, and to further the ends of justice, that I would suggest the query whether some change may not be made in the mode of investigating these cases, which would be likely to detect the guilty, protect the unfortunate, and satisfy public opinion. It may be impossible to give a definition of insanity which will embrace all cases; but there is at least one element that must enter into any definition that may be given, viz., disease. If, then, disease be a necessary element of insanity, freeing from responsibility, it is obvious that it presents problems that can be solved, with any degree of certainty, by those only who have made disease the study of life. It is a medical rather than a metaphysical question. This is the common opinion, and the courts act upon it, and seven physicians are always called to testify in such cases. But in most instances no suitable opportunity is afforded for investigation. Very frequently the medical witness sees the prisoner for the first time at the bar, and is required to pass gravely on his mental condition, with only a distant view of the accused, and the crude notions of unprofessional and probably ignorant and prejudiced witnesses as his guides. It is an embarrassing position, not willingly assumed by intelligent medical men. In fact, it is a matter of notoriety that physicians avoid a summons in such cases by every means in their power, when they would not shrink from the discharge of the duty, if allowed an opportunity to analyze the case as they are daily doing in regard to other diseases. He is required to pronounce an opinion which may involve the life of the prisoner on the one hand, or interfere with the just administration of the law on the other,

on data which, in ordinary practice, would not authorize a diagnosis in any case of disease, or justify the administration of the simplest remedies.

Quite a large number of publications is upon our table for review, among which is an attractive volume of 450 pages from the Messrs. Lippincott, entitled Introductory Lectures and Addresses on Medical Subjects, delivered chiefly before the medical classes of the University of Pensylvania, by George B. Wood, M.D. L.L.D. More extended notices of all these publications will appear in our journal so soon as the labors of the session close and give us opportunity to read them with the care they merit.

BULLET LODGED IN THE FEMUR FOR FORTY-FIVE YEARS.

[TRANSLATED FROM THE GERMAN BY S. BRANDEIS.]

On the 23d Oct., 1858, an old soldier was admitted to St. Mary's Hospital of St. Petersburg, whose appearance corresponded closely with his age, it being eighty-three years. His body was thin and emaciated, his countenance pleasing. "Pat" led a sober life, drinking no wine, but was fond of milk or tea. In reply to the question, "Old man, what is your disease?" he said, with loud laughter, "Not old age, but I received a wound at Laon, France, in 1814." There was a fistulous opening in the right thigh, below the great trochanter, which, since its origin, forty-five years ago, when the wound was received, has never closed. According to his assertion, the ball might be expected to be lodged in the knee-joint, which supposition he entertained, because flexing that joint was embarrassed. But the ball was found, as we expected, around the coxa. On touching his pulse at the wrist, the radial arteries were found ossified, as also were the carotids and femoral arteries.

During his stay at the Hospital of three and a half months, the patient's strength failed gradually, and on the 5th January, 1859, he expired, without suffering, apparently of marasmus.

From a certificate given him in 1840 by the Superintendent of Invalids, it is evident that "Pat" entered military service on

the 13th of May, 1812, was enrolled in a Hussar regiment, and received a wound at Laon on the 25th of February of the same year, and was invalided in consequence of his wound on the 10th of April, 1816.

On post mortem, the superior part of the femur was resected, and the ball was found behind the trochanter, at the upper part of the neck of the femur. The bullet had first touched the external surface of the trochanter, and, after perforating it, lodged itself below the fossa of the trochanter.

This accounts for the various lesions more or less extensive after excited inflammation and consecutive suppuration had produced destruction of tissues adjacent to the nidus of the bullet. The cavity occupied by the ball was itself covered with false membrane.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS.

Reported by JOHN THRUSTON, M.D., Secretary.

FIFTY-SIXTH MEETING, Tuesday, October 18, 1859.

A communication from Dr. E. D. Foree, addressed to the President upon the subjects of Trismus Nascentium and Diphtheria was then read, and, on motion, it was resolved that the President be requested to inform Dr. F. that these subjects had been laid over for the discussion at the next meeting, and to solicit his attendance at that time:

WAVERLY, 24TH OCTOBER, 1859.

Dear Doctor:

I have delayed replying to your polite note conveying the invitation to be present at the meeting of the College of Physicians and Surgeons to-morrow night with the hope of finding myself able to accept it, but am unable to do so on account of sickness in my own family.

I should take great pleasure in listening to the discussion of the subject in questien, in which I have been deeply interested for the last ten years.

Will you do me the favor to present to the Fellows my earnest thanks for the dignity they have given the subject of my note, and for the kind invitation they extended me, and accept

yourself my thankful acknowledgment for the polite manner in which you conveyed it.

I do not include with the cases of trismus mentioned in my note, any other form of convulsive disease occurring to children within the first two months of life, as I infer you somewhat suspect I have done from the incidental mention in your letter of a case of tonic spasm. Those I have seen quite often, the majority of them recovering. The seventeen cases mentioned had fully formed trismus. The mouth so closely shut in every case that the nipple could not be received, nor had the jaw any appreciable latitude of motion. A part of the time the trismus was not so marked as at others, it is true, but all the while notable. As a fair average of cases, I give you case No. 9 from my note book.

A bright mulatto, seven days old, the mother an active, healthy young negress. Labor easy—two hours duration; vertex presenting. The child weighed nine pounds, well formed, lived well from the instant of its birth. The meconium was passed freely within two hours of birth, and light, colored stools showed themselves within the first forty-eight hours; has nursed well from the beginning until last night. The funis separated the evening of the fourth day. The umbilicus looks well; no inflammation; had a single drop or so of pus for a dressing or two after separation; urinary functions good.

At 2 o'clock this morning, 7th day, upon taking it up to nurse, it seemed to snuffle a little, and refused the breast. The mother and mistress thought its throat sore. Its countenance is unmistakably that of trismus. The retracted cheeks, pinched nose, and sharpened features, are all present. The masseter muscles are firmly contracted, and the gums brought in close proximity. The muscles of the belly and back are also in tonic contraction. Respiration humid and by spells nervous, as though there is some convulsive movement about the glottis.

At intervals of forty or fifty minutes, clonic spasms for a few seconds take the place of the fixed contractions of the muscles of the trunk. Phrenismus must also occurat intervals arresting respiration. This case died the 2d day (I should think from the history I received), from prolonged phrenismus.

I hope you will remember the main points made in the dis-

cussion to-morrow, so that when we meet you may do me the favor to communicate them, as I cannot ask an encroachment upon your valuable time for writing them.

Yours, E. D. FOREE.

The subject of Trismus Nascentium being then taken up, Dr. Yandell stated that he had seen but five cases, the most of them occurring in an alley between 4th and 5th and Market and Jefferson Streets; three of the children were the offspring of one woman.

The President had met with but one case, that one the child of a negress in the vicinity of his office.

Dr. Wible had seen one case, the child of a negro woman confined in a close, dark kitchen.

Dr. Hardin had never seen a case.

Dr. Miller's observation had been singularly slight; did not know that he had ever seen a case; a great many, the children of both white and black women, have what nurses are in the habit of calling inward fits; of these he had seen a good many, the most of which died in two or three days. Referring to ———'s distinction between "black and white fits," he supposes that the black fits of this author, if not identical with, correspond very nearly to, the malady now under discussion. Relative to the causes tending to the production of Trismus Nascentium, he thinks that the history of the disease as observed in its greatly diminished mortality in the Dublin Lying Hospital, under an improved system of hygiene, establishes pretty conclusively the fact that it is uncessary to seek further for a cause than impure air. To which Dr. Wible and others subscribed, Dr. Wible suggesting that improper nursing under the condition alluded to by Dr. Miller might very largely contribute.

This subject being reserved for further discussion, adjourned to meet Tuesday, Nov. 1, 1859.

JNO. THRUSTON, Sec'y.

Fifty-eighth Meeting, Tuesday, Nov. 1, 1859.

President Dr. Hewitt in the chair.

Members present—Drs. Ronald, Brandeis, Bayless, Anderson, Thompson, Wible, Polk, Powell, and Drs. Foree and Newman by invitation.

Minutes of back meetings read and adopted.

Dr. Ronald presented specimen of fœtus at four months.

Trismus Nascentium being then taken up for discussion, Dr. Brandeis read a resume of the views of authors upon this sub-

ject, relative to which, on motion of Dr. Powell, it was resolved to solicit of Dr. Brandeis his paper for preservation amongst the archives.

Dr. Foree then, on invitation, repeated the substance of his letter treating of this subject.

Dr. Wible, fearful that the report as read of last meeting's proceedings did not sufficiently embody his ideas, the report representing him as subscribing to the impure air cause, took occasion to say that foul air is the most frequent condition associated with these cases—thinks it a remarkable fact that there should be, in so many cases, effusion of serum and blood as shown in the investigations of Brandeis—does not advocate Dr. Sims' idea, that this is due to compression of the occiptal bones; supposes that there is something about the cord that determines the disease. And further, that in Dr. Foree's neighborhood, there must be something in the management of the children influencing the seizures; regards fresh air as necessary to children—to the attainment of this end, thinks that their heads should not be covered by the bed-clothes; the bed-clothing of negro children is penetrated by bad odors—they stink; so, as a rule, do cradles much used by them stink.

Dr. Powell in the chair.

Dr. Anderson regarded Dr. Wible's theory as crude; if foul air is the cause, why does not Trismus occur all over the country, and particularly in the Southern States? In 670 births occurring in his practice in eleven years, he had seen four cases, two whites, two colored—three girls, one boy colored; of these, three got well, the disease manifesting itself before sloughing of the cord had taken place, between the fourth and fifth days; mothers were all healthy; stout children; presentations head; the labors all easy; no pressure upon the brain; regards as cause the irritation of the cord from improper tying; when spasms come on, is in the habit of loosening the ligature and scarifying the cord; some relief afforded with the child that died; fine thread was used as a ligature.

Dr. Ronald said it was admitted by all authors that very few cases occurred after the freeing of the cord; thinks, therefore, it can't be attributed to Dr. Anderson's theory of tying; if it were the fact we would have a great many more cases occurring before the falling of the cord; regards it as much more reasonable to suppose that suppuration in the cord and its absorption produces it; the spinal congestion which had been observed, he thinks, is dependent upon the spasm.

DIPHTHERIA.

Dr. Foree next gave the history of several cases of Diphtheria he had observed. The history of which, and the prac-

tice pursued, were given in the letter adressed to Dr. Hewitt, read at a former meeting.*

Dr. Wible had recently been reading an account of an epidemic of Diphtheria prevailing in England; is disposed to regard it as analogous to, if not scarlatina itself; many years ago saw an epidemic of putrid sore throats; funis tonsils, etc., discolored; no deaths; looks upon it now as scarlatina; sees a good many cases of sore throat—so sore as not to admit of examination, and without any eruption; very shortly other members of the same family are taken with palpable scarlatina; supposes the exudation in diphtheria the product of a modified inflammation; not true false membrane; the disease a modification of Scarlet Fever.

Dr. Ronald inquired if the eruption is necessary to Scarlet Fever.

Dr. Powell replied that it was not.

Dr. Ronald has seen cases with the eruption absent and dying, and members of the same family in which the eruption was distinct.

Dr. Powell thinks that when the eruption fails to appear, it is due to want of vital power.

Adjourned to meet Tuesday, Nov. 8, 1859.

JNO. THRUSTON, Sec'y.

LOCAL ANESTHESIA.

A dentist, by the name of Branch, of Galena, Ill., was the first person, I believe, who extracted teeth without pain by first destroying the sensibility of the parts by the use of a mixture of ice and salt applied locally.

Having, on several different occasions, seen this by no means pleasant operation performed without any of the usual suffering, I was not slow in acting upon the idea, and have for some time been in the habit of performing minor surgical operations, using the same means to deaden sensibility. I have been so pleased with the result, that it has occurred to me that a brief mention of it might interest some of the readers of the News. Although the plan may be familiar to most, still I know of but one physician, in a large extent of country, besides myself, who is accustomed to it, and he adopted it a considerable length of time before I did, and reports satisfactorily. Coarse salt and

* We regret that Dr. Foree's interesting letter has been mislaid by our publishers. We promise our readers that it shall appear in our next number. The first form containing a portion of it had been printed before we discovered the loss.

pounded ice are mixed together, and by means of a bladder applied to the place to be operated upon sufficiently long to produce the effect desired. The French condum will oftentimes be found a convenient substitute for the bladder, as in certain situations it can be more readily used. Of course there is danger of carrying this freezing process too far, so that the vitality of the parts may be endangered, but of this the physician must be the judge, as no exact time can be given for its continuance. Generally, one or two minutes will be sufficient.

Not long since I opened a very large, deep seated, acute abscess in the thigh, in an exceedingly nervous patient, after completely benumbing the parts in the way mentioned, and there was no more evidence of sensibility than if the person had been completely under the influence of chloroform. In another case, that of an abscess near the rectum, where the parts were extremely sensitive, the same result followed. Lancing a felon, it is well known, is an excessively painful operation, yet I have seen a number of such cases where the patients were not aware of the cutting until informed that it was all over. Many other instances might be given, but as the editors of the "News" are professors in a first class medical college, I wish to be excused from enlarging upon a subject with which they may be perfectly acquainted.

SQUILLS.

Election of Dr. Channing to the Obstetrical Society of London.—We learn with much pleasure that, at a recent meeting of the Obstetrical Society of London, Dr. Walter Channing was elected an Honorary Fellow.

It is needless for us to say that the Society could not have selected a more worthy recipient of this distinguished honor, marked as he has been, through the long career of his professional life, by those high qualities which have placed him among the most eminent physicians of our country.—*Boston Medical and Surgical Journal.*

The tardiness of this number of the *Monthly Medical News* is a source of regret to all of its numerous subscribers, but to none so keenly as to the editors themselves. It is our determination now to make the "News" what it ought to be—to make it sought for not only by the followers of Æsculapius, but all who take an interest in the health and prosperity of the human family.

Editorial Department.

SCARLET FEVER.

BY JUNIOR EDITOR.

In twenty-five successive cases of this disease, which have been latterly under my professional care, the treatment consisted in inunction of the parotid and submaxillary regions by an unguent composed of fifteen grains of the extract of belladonna to an ounce of simple ointment. This was applied freely and frequently as soon as the patient complained of sore throat. A piece of flannel was afterwards applied, and in no case was any other treatment adopted, except the administration of small quantities of neutral mixture during the day. In some cases of rapidly occurring tumefaction of the throat, the prompt subsidence thereof under the treatment, left no room for doubt as to its efficacy. I do not pretend to offer this mode of treatment either as a cure for Scarlet Fever, or as the sole means to be relied upon in any case, but I do claim for it a controlling power over the engorgement, and hence a prevention of those destructive ulcerations of the throat which are so much and so justly dreaded. In some cases it has seemed to have a salutary effect upon existing diarrhœa as soon as the system was influenced by the remedy.

In one case only was I compelled to discontinue its use because of its constitutional effect. I will not here discuss its modus operandi, but simply suggest that the experiments of physiologists in reference to the influence of the organic nerves upon glandular organs, coupled with an experience of thirteen years in its use as a restraining remedy in salivation, and a more limited but somewhat extensive observation of its influence on the mammary gland, seemed to justify, on purely rational and philosophical grounds, the adoption of the course pursued.

During a discussion some months ago in the College of Phy-

sicians and Surgeons upon the merits of belladonna treatment in profuse lactation and mammary inflammation, I took the liberty of intimating that perhaps the contradictory results of the observation of members might have obtained from a failure to distinguish between the pathological condition of the gland itself, and that of the areolar structure in relation with it, for if my views of its action be correct, it might not influence directly the latter condition, but would prove potent in the former. Since the results of the application as indicated were reported to the College, some of my friends have adopted the same course, and with the same results, viz., perfect success in every case.

They, therefore, concur with me in attributing such results to something else than mere coincidences on negative effects. They may not be, but the application is a simple, and, under judicious watchfulness, a harmless one, and I will be as free to confess its inertness as I am now anxious to press its claims to attention, so soon as my duty shall seem to indicate such a course.

Those of our subscribers for 1859 who have failed to receive the complete issue of the Medical News for that year, will please inform us what numbers are lacking to make up their volume. We will promptly and with pleasure forward the missing numbers.

We are obliged once more to ask our subscribers to bear with a delay in the appearance of our paper, a much longer delay than we had thought likely to occur. Owing to the change of form and the completion of some other arrangements necessary thereto, some postponement of the period of issue was unavoidable, but we had no thought that there could have arisen a necessity, or any train of circumstances, likely to occasion to our subscribers so long a deprivation of their rights.

It would probably be hazarding too strong a declaration to say that the like will not happen again, but we most solemnly promise that we will try to prevent its re-occurrence. In the meantime, as some atonement, we offer them a paper very much enlarged, and think we can safely affirm that our one

year's experience will enable us to pledge our subscribers that they will find increased interest and profit upon our pages. Will all those who feel an interest in our success and permanancy, lend us a helping hand, and sustain our enterprize, both by a renewal of their subscriptions, and by the frequent contribution of short, sound, practical articles? A most voluminous and widely spread correspondence with the medical profession of the United States has convinced us that a vast amount of talent and most valuable experience remain buried, so far as the literature of the profession is concerned, about our cross roads and small villages. We have in our possession letters, the off-hand effusions of men whose names have never appeared in a medical journal, which would do credit to any periodical, however ambitious in character. Will not these solid, reflecting men lay aside their modesty on this subject, and give us the benefit of their long practice and matured observation? We hope that our friends will respond to our calls in both the above noted particulars. On our part we promise to work for them without hope of pecuniary or other reward, except the honest gratification of promoting the welfare of the profession of our choice, and the pride we naturally entertain in sustaining a medical periodical in our native State.

We copy the following from "The Standard," published in Clarksville, Texas. We do not often copy such articles from the public press, but in this instance the gentlemen named are well known to a friend who vouches for their standing and attainments.

May we not hope to receive from our friends in that State reports of cases occurring there, which may be of great interest to the profession, and which should reach that profession through proper channels? Our subscription list is extending because of their kindness. Ought not the interest of our journal to increase from the same cause?

"An Extraordinary Freak of Nature.—A most remarkable case of two children *united*, occurred a few days since in the practice of Dr. E. S. Look, of this place. A negro woman, property of Mr. Dan. Greggs, after a labor of five days' dura-

tion, was delivered by aid of instruments, of still-born female twins, well developed, weighing twelve pounds, and uniting throughout the whole extent of the abdomen, having that cavity in common.

"A carefully conducted post mortem examination, made by Dr. J. B. Minturn, assisted by Drs. Look, Gordon, and Barry, revealed the following extraordinary connection and relation of the organs of the abdomen. Their chests and the organs contained in them, were fonnd correct in every respect. Their livers were united so intimately, it was found impossible to separate them, although it was evidently a double organ. Spleens and kidneys natural, stomachs also, and the intestines natural, until within a foot of the Ileo. Cœcal Valve, where they became united and continued as one intestine to the rectum, which formed a *cul de sac*, more than an inch from the external part, which would have precluded the possibility of their living, had they been born alive. There was but one primary bladder, and it common to both children. The arch of the Pubes was not complete, and althongh the external female organs were natural a short distance within them, there arose a stout and thick antero-posterio septum or wall, dividing the vaginal passage into two passages, each leading to a separate and well developed womb, furnished with one Ovary and Fallopian Tube, which was attached and entered the womb at the apex of the fundus. ***

Flora of Illinois.—From a communication of Dr. George Vasey, of Ringwood, to the "Chicago Academy of Sciences," we learn that about 200 species, including some 50 species of Cryptogamic plants, have been added to the catalogue of the State, making some 1,200 species thus far observed.—*Chicago Medical Examiner.*

☞Contributors, Correspondents, and Publishers, will please be particular in the superscription of that which they may desire us to receive☜

ADDRESS LEGIBLY,

☞*LOUISVILLE MONTHLY MEDICAL NEWS.*☜

MONTHLY MEDICAL NEWS.

VOL. II. LOUISVILLE, KY., FEBRUARY, 1860. NO. 2.

CHLOROFORM IN MIDWIFERY.

Read before the College of Physicians and Surgeons of Louisville, as introductory to a discussion of the subject. By R. C. HEWETT, M.D.

The first effects of the inhalation of chloroform, are various degrees of paralysis of the nerves of sensation. In a higher degree, its influence reaches the medulla oblongata and the respiratory system becomes affected. If, after these effects appear, the inhalation of chloroform be still continued, the organic system of nerves becomes implicated, and death may result from paralysis of the heart. Thus we have in chloroform, the means of producing all degrees of paralysis, from a slight insensibility to absolute death. The first impression of this agent is upon the ultimate ramifications of the sentient respiratory nerves, and in its more remote effects it enters into and modifies the condition of the blood. In its use, the question to be solved is, in what degree may we safely impress the nervous system, and how far may the blood be modified with impunity? A satisfactory solution of this question can be worked out only by a long series of such observations as are now being made in the use of chloroform, in all parts of the civilized world.

In my observation where *pure chloroform* is used, the great majority of persons become quietly insensible, without the stage of excitement which sometimes precedes the sedative effects. I am satisfied, that in most cases, if not all, in which such excitement appears, impure chloroform is used, or the patient at the time of beginning the inhalations, is in a state

of alarm and excitement, or is surrounded by disturbing influences of some kind.

A lady of this city, requested me to give her chloroform in order to have some teeth extracted; and made an appointment for a certain hour of the next day. When I met her at the time designated, I found from her appearance and manner, she was much excited, and her pulse was greatly accelerated. In this condition, she commenced inhaling chloroform, and after a few inspirations, became violently excited, threw herself out of the dentist's chair, and all the influence of her husband could not induce her to continue the chloroform, or even to remain in the room. I was satisfied she had become excited by anticipating the dental operation so long before the appointed hour arrived, and I told the dentist and her husband, that we would take her by surprise, on some day to be designated by them, and give her chloroform before she would have time to become excited. This expedient succeeded completely. She readily came under the sedative influence of chloroform without the least evidence of excitement. Hence, before commencing inhalation, the patient should be made as calm as possible by assurances of perfect safety, and all noises and other disturbing causes should be removed.

In administering chloroform, I usually employ a hollow cone made of a sheet of paper, with a base large enough to cover the nose and mouth, and having the apex torn off so as to admit the air freely. Into this cone a small cambric handkerchief is placed, upon which the chloroform is poured. The advantages of this arrangement are, that the chloroform does not come in contact with the lips and nose, and thus produce a disagreeable smarting, and when inhalation is suspended evaporation is checked, and the chloroform is retained by pinching up the two ends of the cone. The patient's stomach should not be distended with food when chloroform is used; nor is a too protracted fast desirable, as depression of the vital energies from any cause makes the unfavorable influences of chloroform more liable to occur. During the first inhalations, the chloroform should not be applied close over the mouth and nose, and the patient should be carefully watched to see if any idiosyncrasy exists, forbidding the continuance of the inhalations. That such idiosyncrasies do exist in some cases, perfectly independent of any organic disease, I have no doubt.

The degree of anæsthesia most favorable for the complete safety of the patient, is that in which sensation is in a great measure suspended whilst consciousness remains. Patients frequently say, they have enough chloroform for the present, and evidently suffer very little pain, although conscious of all that is going on. Carried to this extent, anæsthesia does not seem to impair the motor forces of the system in any appreciable degree. If the sedative influence be urged on to a greater extent, consciousness and voluntary motion are lost, slight stertor appears in the respiration, the pulse becomes slower and the eye is turned up. In a still higher degree, all these effects are deepened and the conjunctiva may be touched without any evidence of sensation. When this degree of anæsthesia is reached, it has been carried as far as the boldest may dare to venture, for in such symptoms we have evidence that the organic system of nerves is becoming implicated, and complete anæsthesia of that is death.

One fact in connection with the use of chloroform should never be forgotten, and that is, that its effects continue to increase in intensity for some seconds after the inhalation of it has ceased. Hence in giving it, we should if possible, stop the inhalation short of the full effect we wish to produce.

One of the alarming effects of chloroform, which however, I have never witnessed, but which is mentioned by writers on the subject, with sufficient frequency to show that it is not a very rare occurrence, is a sudden death-like pallor, with interruption of the circulation and respiration, coming on without any premonition, and in some cases, after a very few inhalations of the anæsthetic. I look upon this accident as syncope produced by chloroform, and depending most probably, upon some idiosyncrasy of the person in whom it occurs. It is not very evident how the effect is produced. We know however, that some persons faint from disagreeable intelligence suddenly communicated, and others from an unpleasant sight or odor. May not the disagreeable sensations incident to the first inhalations of chloroform, disturb the function of the cardiac nerves, producing syncope in the same manner as it is often produced in certain idiosyncrasies by an offensive odor, &c?

What ever may be the true explanation of this accident, it is in my opinion, syncope, and the heart is at fault. It should

be treated by quickly depressing the head, elevating the inferior parts of the body, and by dashing water in the face, or by passing a current of electricity through the heart, &c.

In other cases, asphyxia occurs as the result of an undue proportion of the anæsthetic influence being displayed upon the respiratory nerves. Artificial respiration is the proper remedy for this condition.

A few weeks since, Dr. Bayless and I were called to a case of dislocated shoulder joint. We found the patient suffering intense pain. He told us the same kind of accident had happened to him frequently before, and that he had generally been put under the influence of chloroform to have the luxation reduced. We placed him upon the floor, and commenced administering chloroform. After four or five inspirations the respiration suddenly stopped and remained so for fully twenty seconds. By shaking him briskly, respiration was restored. During this pause in his breathing, his pulse remained perfectly normal. As there was no insensibility as yet produced, we determined to try the chloroform again; but as before, the respiration stopped, and we were glad enough to commence manipulating the shoulder, so that the pain might arouse the respiratory functions. We advised him never to use chloroform again.

In midwifery, it is difficult to determine from all that has been published on the subject, what is the exact influence exerted by chloroform upon the parturient process. Some claim for it, that it produces insensibility only, while others maintain that it diminishes the motor action of the uterus. Some object to the use of anæsthesia as being liable to retard labor, and as favoring the occurrence of uterine hemorrhage. Others deny that it has any such tendency, but strangely enough teach that chloroform is a most valuable agent in removing the resistance of the uterus in operations involving the introduction of the hand into its cavity. One writer condemns the use of anæsthesia in ordinary natural labor, but thinks it may be used with great advantage in all obstetric operations, and especially in turning. Now, if chloroform is proper in such operations as turning, in which, to be of any service, the impression produced must be vastly more profound than in natural labor, why is it more hazardous in the latter case than in the former?

My own impressions as to the use of chloroform in parturition are, that a considerable degree of insensibility may be produced short of suspending consciousness and yet the motor forces may not be at all affected. If the impression be carried so far that consciousness is lost, motor force is impaired, and uterine power is diminished, but of course, not to so great an extent as that of the vountary muscles. We may admit that the expulsive power of the uterus is lessened by chloroform, and yet not concede that, as a general rule, it retards the progress of labor, for it also relaxes the vagina and os externum, so that what is lost in motor force is compensated for by diminished resistance. There are some cases however, and I have certainly seen more than one, in which the use of chloroform had to be suspended on account of its evidently retarding and enfeebling the uterine contractions so as to delay the termination of labor.

A very limited experience with chloroform in midwifery, must soon satisfy any one that it can not be used so as to produce the same degree of anæthesia in all cases. Every accoucheur must have often noticed the wonderful difference there is in the force of the uterine contractions in different females. Some years ago, a case occurred in my practice, in which there was mal-position of the fœtus, and it was deemed proper to attempt turning. There was most powerful uterine action, and the uterus was so firmly contracted about the fœtus that it was utterly impossible to introduce the hand. With a view of diminishing the force of the uterine contractions chloroform was very freely given, and most profound anæsthesia was produced and continued for a long time, but not the slightest impression was made, either upon the force or frequency of the contractions. In cases having such excess of uterine force, chloroform may be freely used. But other cases are seen, in which the propelling power of the uterus is so feeble that the expulsion of the fœtus seems to be accomplished in a great measure, by the voluntary efforts. In labors of this character, we can safely produce anæsthesia in a very limited degree only.

An objection has been made to the use of chloroform in labor, on the ground that pain in parturition is but a fulfillment of the primeval curse upon our race, and that we have no right to undertake to suppress it. If this be correct reason-

ing, we are equally debarred from doing any thing to mitigate the suffering of child-bed. But surely in spite of all we can do in allaying pain, there is suffering enough during gestation, labor, and convalescence, to fully answer all the conditions of the original penal decree. Besides the great amount of suffering attendant upon labor in civilized life, is an abnormal condition incident to the cultivation and refinement of the nervous system, and as such we very properly combat it as disease.

In my opinion, all parturient females have the right to demand of us the employment of all means that can be safely used, either to facilitate labor, or palliate the suffering incident to it. Hence, if there be no counter-indications, we should permit the use of chloroform in all cases in which it is demanded. But judgment must always preside over its administration, determining when it should be withheld, and how far its effects should be carried. And we should never forget that its action may produce death, and that there are idiosyncrasies that greatly increase the tendency to such a result.

In ordinary labor, anæsthesia should be produced in that degree only in which sensation is in a great measure obliterated, and yet consciousness to a considerable extent remains. As a general rule, I do not begin administering chloroform until the second stage of labor has commenced. The objection to its use in the first stage, is that the long continued employment of it may impair the uterine force, and thus retard the completion of labor, and perhaps favor the occurrence of hemorrhage.

In using chloroform, the patient is permitted to inhale it, cautiously at first, until she becomes quiet or ceases to make complaint of pain. Its use is then intermitted, until her movements show that another contraction of the uterus is coming on, when the inhalations are resumed, and continued to the same extent as before, and so on until labor is terminated. The *quantity* of chloroform employed in a given case, is not to be regarded so much as the effects produced. Three or four inhalations of it will affect some persons, as much as others will be impressed after continuing its use two or three minutes.

There are cases however, in which there is an unusual degree of excitability, and in which the suffering of the patient is greatly out of proportion to the progress made in the labor.

In such cases, I have given chloroform before the os uteri was dilated, and in some instances with marked benefit, not only in allaying suffering, but evidently in expediting the parturient process.

I have heretofore incidentally mentioned a case of this kind occurring in my practice. The patient had been under the care of a midwife from 8 o'clock in the evening until 9 o'clock the next morning, at which time I was called to see her. She was thin, pale, and decidedly of the nervous temperament. I found her suffering the most intense pain, and was told she had been suffering in the same manner during the preceding thirteen hours. Her agony seemed to be without intermission, except in a very slight degree. It was most distressing to witness the contortions of the body, and hear her almost incessant outcry. Upon examination, I was surprised to find the *os uteri* dilated enough only to admit the end of the finger. I was told, that in her previous labor she had suffered in the same way for two days and a night. Departing from my usual custom of waiting for the patient to ask for chloroform, I proposed and finally insisted upon its use. I found there was an unusual susceptibility of the anæsthetic influence, so that after a few inhalations the patient became perfectly calm and quiet. In about twenty minutes after commencing the use of chloroform, I found the uterine os dilated to fully an inch and a half in diameter, and in less than three hours the child was born. During the whole time, there was almost complete anæsthesia, and the mother was not aware of the birth of the child until ten minutes after it occurred. The subsequent progress of the case was satisfactory in all respects.

In breech presentations I would not give chloroform, unless I felt assured that the uterus possessed such ample expulsive energy that its power would not be likely to be diminished so much that there would not be force enough to assist in expelling the fœtal head.

I have not observed any unfavorable effect from chloroform in parturition, except that in a few cases it evidently impaired the force and frequency of the uterine contractions, and thus retarded the progress of labor. Still, when this accident occurs the uterine energy is usually soon restored by suspending the use of the anæsthetic. In all other respects I have found

chloroform to produce the most favorable results. I have always noticed, on the day succeeding delivery, that those women who use chloroform are less prostrated, more cheerful, and suffer less from muscular soreness, than those who get through their labors without the aid of anæsthesia.

Many unfavorable occurrences are, I doubt not, ascribed to chloroform, with which in truth, it is in no way chargeable. A case of most profuse post partum hemorrhage occurred in my practice, after the free administration of chloroform, and I at once mentally charged the dangerous condition of my patient upon the anæsthetic; but I subsequently learned that in her several previous labors in which chloroform was not used, an equally copious hemorrhage ensued.

Out of the many thousands of parturient females who have used chloroform, some few may perhaps have died from its effects; but is it not very probable that out of the same number of women in labor, as many or more would have died of *shock*, if anæsthesia had not been produced?

It has been claimed for chloroform, that its use in labor has been very rarely followed by puerperal peritonitis. I would be glad to hear the experience of the college on this subject.

ABSTRACTS FROM FOREIGN JOURNALS.

In the Dublin Quarterly for November, 1859, we find an excellent paper read before the Belfast Medical Society, by Dr. Haskin, on Mastitis. We make an unusually long extract from this paper, but the subject is one of so much importance, and the article so practical, that we are satisfied our readers will not find it tedious or uninteresting:

"If we look to medical writers for instruction, the highest obstetric authorities afford us very little information, and the variety of remedies which they suggest is in itself an evidence of uncertainty and doubt. Dewees recommends stuping with vinegar for twenty-four hours; this failing, leeches. Burns says: 'It is very difficult to prevent suppuration; it is to be attempted, however, by purgatives, tepid poultices of bread and milk, or cloths moistened with tepid water; gentle friction with warm oil.' He condemns cold solutions of acetate of lead,

alone, or preceded by leeches, recommends the breast to be supported, and has not had any experience of the internal exhibition of tartar-emetic; recommends warm poultices in advanced stages, and evacuation by lancet. Ramsbottom says: 'Leeches must be had recourse to, and repeated as often as occasion may require; brisk purgatives are exhibited, poultices and warm fomentations, and the use of the lancet when the abscess points.' He says the child should be applied before suppuration even with more assiduity to the affected side than to the other, and, failing this, the pump or the breast-pipe. Drs. Hardy and M'Clintock allude to the advantage derived from the use of tartar-emetic: where the breasts have been distended for the first time; they say: 'This painful state is best relieved by rubbing the breast very well with warm oil; and if any febrile excitement attend, small and frequently repeated doses of tartar-emetic are given, and the bowels freed. In treating the abscess, poultices, warm spirit dressings, and strapping, as in hernia humoralis.'

"And this, in fact, is the sum of the treatment recommended by our obstetrical celebrities; they advise, without much confidence, leeches, venesection, warm applications, cold lotions, stupes, poultices, purgatives, straps for support; and, when the usual termination arrives, the use of the lancet. These remedies are, in my mind, only adjuncts in the treatment; they should never be elevated to the position given them; they are only capable of relieving symptoms, with, perhaps, the exception of venesection (not admissable in every case); and they cannot ever influence to a sufficient extent the derangement of vital energy which, in reality, constitutes inflammation. No doubt, saturnine lotions may diminish the redness and heat, warm stupes relieve the painful tension, and leeches, if repeated, may partially relieve congestion, although it is well known that their frequent application to the breast in amenorrhœa produces in a short time great congestion and enlargement of that organ, with the establishment of the menstrual discharge. Yet, while the attendants are hoping that the disease is checked from the apparent decline of those symptoms, inflammation is steadily pursuing its course, structural alteration succeeds to functional derangement, and abscess and ulceration are the natural results.

"While denying the utility of the above-mentioned remedies, I cannot sufficiently reprehend the use of the breast-pump and tubes, so much relied on by some practitioners. I cannot understand how by mechanical means we can hope to restore secretion to a gland in the state of inflammation; the return of the lacteal secretion is an indication, or rather an accompaniment, of cure; but they gravely err who, in this case,

mistake the effect for the cause; suspended secretion can only return after the subsidence of inflammation, yet many regard its suspension as the cause of the inflammation. Suspended secretion, however, like redness, heat, and pain, is very useful in directing our attention to the seat and progress of the disease. If we had a patient suffering from inflamed kidneys, with scanty urine, and, perhaps, peritoneal effusion, what but a false pathology could induce us to rely principally upon stimulant diuretics and hydragogue purgatives, overlooking altogether the changes in structure of the secreting organ; and yet it is not more false in theory or in practice to hope to restore the healthy state of the mamma by this strange application of hydraulic powers?

"The mode of treatment which I propose to recommend, and which, within the limit of the first or adhesive stage, has almost uniformly proved successful, occurred to me in this way. I had a patient recently delivered of twins; she was of a very full, plethoric habit, and about four or five days after delivery presented all the marks of mastitis in a very violent form. The secretion was completely suspended, and there were present all the symptoms of great constitutional excitement. I felt that something decisive must be done, and that the ordinary *dilettante* plan would *not* do; I was averse to bleeding from the arms; and having observed the powerful effect of tartarized antimony in the treatment of orchitis, a gland of similar nature and organization, I resolved to give it a fair trial. It was administered in half-grain doses; and this was continued until it produced its full effect, nausea for several hours, free vomiting, moderate purging and diaphoresis. When visiting the patient twelve hours after, I was agreeably surprised to find the pain and swelling gone, the pulse restored to the natural standard, all headache and constitutional symptoms removed, and the breast pouring out its lacteal fluid. I should mention that along with this I caused her breast to be stuped with flannel wrung out of hot water every half hour for twelve hours, and every time covered over with a small wooden bowl, previously heated in hot water. The second case in which I tried it was equally successful, but with this unpleasant result, that the child, then a few days old, after partaking of the mother's milk, took convulsions and died, whether *post hoc* or *propter hoc*, I could not then say; but since that time I have been particular in directing that the first secretion of milk, after taking the tartarized antimony, shall be withdrawn, and the breast thoroughly emptied before it is restored to the infant. Facts are wanting upon the subject of the absorption and detection of active medical or chemical agents in the lacteal secretion. The science of Toxicology has done a certain

amount of good in this way, and will probably further elucidate the subject; but, so far, an interesting field of observation is open to us. In reference to this point, however, I have had great difficulty in restraining mothers from yielding to the importunity of the infant. In many cases they have given the breast to the child with perfect impunity; but in others, free purging and vomiting, without any fatal effects, were the results. The usual formula I prescribed was four grains of tartrate of antimony dissolved in four ounces of camphor mixture, of which a tablespoonful was administered every fifteen minutes till vomiting was induced. This was usually more than sufficient for the purpose; but I have had occasionally, in peculiar constitutions, to give at least eight grains of the salt before any appreciable effect on the stomach was produced. It is well known what resistance disease offers to medicine, and that remedies which, in a healthy state, would prove injurious, in disease act a salutary part. For this reason I have never yet met a case of mastitis, in which tartar-emetic was contra-indicated, or in which it was productive of injury. I have even given it after weaning, when pregnancy was coexistent, without any bad result following; the mother having been ignorant of the fact, or having concealed it from me.

"Fully eighteen years have passed since I first adopted this practice; and although I cannot even guess at the number of cases I have successfully treated, yet having had charge of the cases arising from more than 1,200 labors, which I have since that time conducted, I can speak with the confidence that experience has given me.

"Within the limit of four days, then, after the onset of mastitis, that is, during the adhesive stage, I have scarcely ever failed in bringing on a cure by resolution. After that period, when suppuration has commenced, the controlling power of this remedy is lost, and the ordinary treatment applicable to all glands in a state of suppuration must be followed, viz.: hot stupes, poultices frequently changed, the early use of the lancet when suppuration is established, and, after the abscess has been discharged, moderate and general pressure by straps of adhesive plaster having sufficient aperture for discharge of purulent matter. The indurations which often remain are best treated by friction with compound iodine ointment.

"In the secondary abscesses which form after the first have run their course, this remedy is not so successful; the inflammation has then assumed the asthenic type, and in this case quina, opium, and change of air, with mildly nutritious diet, must be chiefly depended on; but, with the judicious use of the remedies above indicated, this second stage, with all its painful concomitants may, in almost every instance, be avoided,

and the structure and important functions of the gland be preserved from injury. To recapitulate: the treatment I have so successfully followed is, to administer tartar-emetic in half-grain doses every fifteen minutes till nausea and free vomiting is produced, and to maintain the sickness for several hours, if required; constant stuping for twelve hours; rest in the recumbent position; ablactation, or temporary weaning of the child; and, if the antimony does not happen to act on the bowels, then a saline purgative. Such has been my practice for more than eighteen years; and so great is my confidence in its efficacy, that I am accustomed to say to my patient, 'Follow my advice in every particular, and I promise you complete relief in twelve hours.' In thus occupying the attention of the Society, I do not lay claim to any discovery in medical science; that all I assume is the successful application to a particular affection of a principle well-recognised in the treatment of disease.

"N. B.—Since reading the above, a friend has called my attention to the fourth volume of the Dublin Medical Journal (first series), published in January, 1834, in which Dr. Beatty has put forward similar views. The Dr. recommends smaller doses, 1-16, of the same remedy at longer intervals (an hour), omitting the medicine if vomiting be produced, and looks for improvement in twenty-four hours. This testimony is of very eminent an authority to the use of tartar-emetic, although overlooked by compilers of our modern text-books, I am very proud to acknowledge; as, although not recommending the remedy in such large doses, it affirms the principle I wish to establish, and may encourage others to adopt this plan, which, although the result of my own unaided observation, might not on that account obtain from the profession at large the attention otherwise justly its due."

In the British Medical Journal for January 14, 1860, Dr. Sloan furnishes a short paper on scalds of the glottis. This paper is based upon a summary of six cases—five of recovery, one of death—in the fatal case tracheotomy had been resorted to. The following extracted "remarks" contain the gist of the article:

Remarks.—Of these six cases, it will be observed that the only one which ended fatally was that in which tracheotomy was performed, and the dyspnœa was never so urgent in this case as in that of Payne, who recovered. According to Mr. Wright, of Nottingham, who is a surgeon of great experience, tracheotomy in scalds of the glottis almost invariably results

in death; and the treatment by leeching, calomel, and antimony, is frequently successful. In the Medical Times and Gazette, there was lately published a report of fourteen cases of scalds of the glottis in which tracheotomy was adopted. If we add to these fourteen the case which I have published, and another which occurred about two years ago in the Dispensary of this town, and which ended fatally, we have sixteen cases of scalds in the glottis in which tracheotomy was resorted to, and, of these, no fewer than thirteen ended fatally, and "in one of the cases which recovered, from certain peculiarities in the history, there is quite room for doubt as to whether the boiling water had ever reached the glottis." These facts are in accordance with Mr. Wright's statement, that tracheotomy in scalds of the glottis almost invariably ends in death, and, as far as my observation has extended, the other part of his statement is equally correct, in which he avers that the treatment by calomel, antimony, and leeching, is frequently successful. In five of the six cases I publish it was successful, and, I believe, if tracheotomy had not been adopted in the remaining case, it would have been successful in this also.

In scalds of the glottis, I believe it is the best course to commence treatment by calomel and antimony as soon as the accident has happened, although dyspnœa may not be present, and to continue the treatment for forty-eight hours, gradually diminishing the doses for the last twenty-four hours. By the early aoption of the treatment the dyspnœa may be prevented, or at least mitigated; at all events no harm is likely to ensue from this course. Case v. shows the danger of omitting the remedies, especially the calomel, too soon.

We extract entire from the same excellent journal, an article from Prof. Simpson, on the "Arrestment of Surgical Hemorrhage":

The Edinburgh Medical Journal for January, 1860, contains an account of a communication lately made to the Royal Society of Edinburgh, by Professor Simpson, on a new mode of arresting hemorrhage in surgical wounds and operations. Dr. Simpson has also, in a letter to Dr. Cathcart Lees, published in the Dublin Hospital Gazette for January 2nd, given in a condensed form the reasoning which led him to the adoption of acupressure, as well as the method itself. After stating that he has used it with perfect success in three cases of excision of the breast, and that he has by means of it closed the carotid artery of a horse, he lays down the following general propositions:

1. Wounds will, as a general rule, heal entirely by primary

adhesion, even under the most difficult circumstances, provided no arterial ligatures are used; as is every day proved, in obstetric surgery, by the successful reunion of vivified lips of vesico-vaginal fistulæ tied together by metallic sutures, and that, too, in despite of the constant contact of urine with one side of these wounds.

2. The wounds in common surgery, as after the removal of a limb, mamma, tumor, etc., in very rare cases only unite completely and entirely by the first intention, or by primary adhesion. For example, M. Velpeau has seen the wound left after excision of the mamma close by primary adhesion in only about one in every thirty of the patients whom he has operated upon; and in all his exceptional cases where complete primary union took place, *no arterial ligatures* happened to be used.

3. Arterial *ligatures* act themselves as foreign bodies in the depths of the wound, and usually soon become irritating agents also, in consequence of the animal fluids which they there imbibe and swell with, decomposing in them.

4. Arterial ligatures prevent reunion in another way—they cut through each arterial tube which they surround, by a process of ulceration, suppuration, and gangrene; and every wound contains, therefore, as many centers and points of ulceration, suppuration, and mortification, as there are ligatures used.

5. Metallic needles or pins, when employed to compress and close the arteries opened in wounds and operations, are comparatively free from these objections, and do not offer the same obstacles to the closure of wounds by primary adhesion.

6. In accordance with the general pathological fact or law of the tolerance of living animal structures for metallic bodies imbedded in them, metallic needles produce little or no irritation by their presence, as seen (*a*) in the harmless retention for month or years, of bullets, small shot, pins, etc., in the body; (*b*) in the relative innocuousness of long needles introduced and lodged for the purpose of acupuncture; (*c*) in the non-irritating character of iron, silver, and other metallic threads, when used as surgical sutures; and (*d*) in the employment, by all our best surgeons, of metallic pins or needles in the union of hare-lip, where the whole aim and object of the operation is to secure and establish primary adhesion of the lips of the wound.

7. The needles best adapted for arresting hemorrhage by the system of acupressure are headed, shaped, and sharply-pointed, like hare-lip needles, but longer when the sides or flaps of the wound which they traverse are thick; and the best material for them, as for surgical suture-threads, is steel or iron ren-

dered non-oxydisable or *passive*, according to the plan and language of Schonlein.

8. In closing, on the interior of a wound, a bleeding artery by acupressure, the needle requires to be passed *twice* through the sides or flap of the wound; namely, *first* from and through the skin of the flap inwards to the raw surface of the wound, and after bridging over and compressing the site of the bleeding artery (on the cardiac side of its bleeding point), then *secondly* it is pushed and passed from the raw surface of the wound back again to the skin; leaving thus exposed on the raw surface of the wound a short arc or bridge of steel lying across and compressing the tube of the bleeding artery, while the two extremities of the needle, that is its head and point, are both left exposed on the cutaneous surface of the flap.

9. The relative angles at which the needle is introduced into, and passes out again through the flap, regulate the degree of pressure exerted by the middle portion of the needle over the site of the artery.

10. The same process applies equally to the thickest and thinnest flaps; a very thick flap, however, as in amputation of the thigh, requiring a corresponding long needle; and sometimes two or more bleeding orifices or arteries being securable by the compression of one needle, but more generally, as is the case with ligatures, a separate needle being required for every separate bleeding artery.

11. In some circumstances and situations, an artery is more readily obstructed by being compressed by the needle against a neighboring bone or other deep resistant point than when pinned, as described above, against the sides or flaps of the wound; and for this purpose the needle must be passed through the flap from without to near the site of the artery, and then afterwards over the site of the artery, and subsequently outward again to the skin at such varying directions or angles as will insure the adequate compression of the arterial tube between the side of the needle and the selected resistant point.

12. In many cases the mere bridging over and compression of the site of the artery by a needle passed not at all deeply into the cellular, muscular, or other soft tissues on either side of the artery, appear to be quite sufficient to arrest all flow of blood.

13. The heads of the acupresses, or acupressure needles, being always left out on the cutaneous surface of the wound, the needles themselves can thus be in every case entirely withdrawn in one or two days, or as soon as complete closure of the artery has been established, leaving no foreign body in the walls or flaps of the wound.

14. The acupressure of arteries instead of the ligature of

them appears, as a means of arresting hemorrhage, to present the following advantages: (*a.*) Acupressure will be found to be more easy, simple, and expeditious than the application of the ligature. (*b.*) The metallic needles in acupressure can scarcely be looked upon as irritating foreign bodies in the wound, and may always be entirely withdrawn in two or three days, or as soon as the artery is completely closed; while the organic ligatures are irritating foreign bodies, and can never be withdrawn or removed till they have ulcerated through the tied vessels. (*c.*) The ligature inevitably produces ulceration, suppuration, and gangrene at each arterial point at which it is applied; while the closure of arterial tubes by acupressure is not attended by any such severe and morbid consequences. (*d.*) The chances, therefore, of the union of wounds by primary adhesion should be greater under the arrestments of surgical hemorrhage by acupressure than by the ligature. (*e.*) Phlebitis, pyæmia and its consequences, or, in other words, surgical or traumatic fever, seems not unfrequently to be excited by the unhealthy suppurations and local sloughings which are set up in wounds by the irritation and effects of the ligatures. (*f.*) Such dangerous and fatal complications are less likely to be excited by the system of acupressure, seeing the presence and pressure of metallic needles has no such tendency to produce local suppurations and sloughs, such as occur at the seats of arterial ligatures. (*g.*) Hence, under the use of acupressure we are entitled to expect both that surgical wounds will heal more kindly and close more speedily; and that surgical operations and wounds will be less frequently attended than at present by the dire effects and perils of surgical fever.

At the meeting of the Harveian Society of London, for 19th January, Mr. Weeden Cooke read a most interesting paper on "the successful treatment of gonorrhœa and gleet without copaiba." We extract largely from the report found in the British Medical Journal of January 28th, and are satisfied that the suggestions in reference to treatment will be found to possess great practical value. The writer's propositions were:

1. That chordee, in ninety-nine cases out of a hundred, was due to spasm, and not to effusion of lymph; and that cubebs, acting as an antispasmodic, formed the most efficacious remedy for this symptom.

2. That the scalding of the water was the result of the acid urine passing over the highly inflamed mucous surface of the urethra; and that this was to be remedied by the administration of the alkaline carbonates, for the purpose of neutralising

the acidity of the urine, thus removing the principal cause of the continuance of the inflammation.

3. That, in all disputed cases, the true gonorrhœa may be known from the spurious by the presence of redness, heat, pain, and swelling, together with a purulent discharge, more or less green and offensive; while a discharge produced by connection with a person who has leucorrhœa, or has recently been confined, will not be accompanied with these inflammatory signs, and the discharge will be milky in consistence and color, differing much from the thick purulent discharge of the veritable gonorrhœa.

4. The time when infection may or may not be apprehended, was discussed in its incubative stage; and at its close a case was given, showing that the disease might be caught from one person, and not communicated to another two nights after, because the purulent discharge had not commenced at the time of the second intercourse. With respect to infection at the close of the disease, the author had been enabled from experience to establish as a law for his own guidance that gleet, *i. e.* mucous discharge from the urethra consequent on gonorrhœa, does not set up gonorrhœa in another person; but that, while any pus is to be found in the discharge, there is probability of infection.

Passing on to the subject of treatment, Mr. Cooke said that, upon inquiry at the London Custom House, he found that 118,390 lbs. of copaiba were admitted to the port of London only, during the first ten months of the year 1859. If this were administered at the rate of half a drachm three times a day, and supposing each patient takes it for three weeks, there was copaiba enough to treat 473,584, or close upon half a million persons, and that in ten months only of the year. Considering how often it fails to cure the disease, how frequently it is rejected by, or at any rate disorders, the stomach, how tell-tale and disagreeable is its odor from the mouth and skin, how occasionally it produces a papular eruption all over the body; and that, in many instances, swelled testicle and stricture may be traced to its irritating influence, while gonorrhœal rheumatism and ophthalmia have been attributed to its administration; Mr. Cooke asked, whether it was not extraordinary that this disgusting medicine continues so long to hold its ground? The abortive treatment by strong injections of nitrate of silver had proved a failure, because in some instances inflammation of the bladder had resulted. The treatment by diluents was slow in its action, and not readily employed by persons engaged in active business. That by diuretics was scarcely more successful; while the administration of saline aperients was generally attended with an aggravation of the

ardor urinæ as well as chordee. The treatment which had been most successful in the author's experience, was the chemical treatment by the alkaline carbonates, given with a view of neutralizing the acid in the urine. Thus one great source of irritation was removed from the inflamed urethra, and the subsidence of the inflammation which nature would effect is allowed to take place. As auxiliaries, especially where there is œdema of the prepuce, lead lotions and elevation of the penis against the abdomen were commended.

The inflammation having subsided, and a mucopurulent discharge being left, Mr. Cooke had found, after giving trial to all the injections which have been at any time in vogue, that the chloride of zinc introduced into this branch of practice by Mr. Lloyd, of St. Bartholomew's, was the most efficacious of any in curing the disease, and that with less discomfort, and in a much shorter time than by any other means. Since employing this treatment he had little, if any, orchitis among his patients. The strength of the injection he most commonly employed was two grains to the ounce; but in some instances, one grain to the ounce was sufficient. While advocating this treatment in persons of healthy constitution, it was necessary to altogether change it in others. In the strumous, in the dyspeptic, in those of dissipated habits, and where the diseased person is an old offender, the alkaline carbonates are not called for, because either the urine is not acid, or the inflammation does not run high. In such cases the tincture of iron, or sulphuric acid and bark, or gentian, or calumba, may be advantageously employed from the commencement, and the chloride of zinc injection in these cases is also of the utmost value in rapidly overcoming the disease. Respecting diet, Mr. Cooke considered that, after the subsidence of the inflammatory symptoms, scarcely any restriction need be enforced, and that beer and wine in moderate quantities may be advantageously used by those who are accustomed to these beverages. He had found long established cases of gleet yield readily to the chloride of zinc injection, accompanied with tonic treatment and generous living. In conclusion he would rejoice if the treatment he had found so serviceable should be followed out by others, and thus assist in banishing altogether from surgical practice the use of so nauseous a drug as copaiba.

Dr. B. W. Richardson has read a paper before the Medical Society of London, on the "Study of Disease by Synthesis." The following were the three inductions with which Dr. Richardson concluded his paper;

1. The results of his experiments taught, as fully as experiment could teach, that the hypothesis of Dr. Prout as to the cause of rheumatic inflammation, was essentially correct. In course of time, Dr. Richardson thought, some modification of view may probably be offered as to the nature of lactic acid and its relationship to the economy. But the broad fact of the origin of the local disease under the influence of an acid poison will remain as ever. If the question should be asked, Why, on the supposition of such a cause for a specific disease, the so-called predisposing and exciting causes play so important a part? Dr. Richardson's reply would be, that the results obtained give an insight into the meaning of these terms, *predisposing* and *exciting*, which they never had before. A man may absolutely live on a diet which is predisposing to the disorder. He may have an error in digestion which shall predispose him to the disorder. But such a man may live on, and may suffer no acute mischief, so long as his excretory functions are perfect; so long as he can burn off the poison in the respiratory changes, or eliminate it in fluid excretions. The excretions of this man being checked, however, in the skin, in the lungs, in the kidneys, and therewith more or less in all these organs, the poison accumulates, floats round with the arterial blood, and wherever it finds a favoring point, excites the local change—*inflammation*.

2. The results related by Dr. Richardson were, he said, of interest as indicating new lines of inquiry for every other form of local inflammatory change. It may be that every local inflammation we know of as due to internal causes is the result of an agent similar in character to the one used by him; an agent not absolutely foreign to the body and not hurtful to the body when present in the normal proportions, for lactic acid is innocent enough as a natural constituent of muscle, but poisonous truly, when accumulating, it pervades tissues to which it is foreign. It would be fair science indeed, with so distinct a suggestion before us as to take an empirical survey of the action of all the organic acids of the economy; but it would be most direct as a primary step to ascertain the nature of the various products eliminated in locally inflamed parts, and to test the effects of such products in quantity, on the economy. For an example, in the fluid matter excreted under the epidermis in erysipelas, what is there present? The fluid has an acid reaction and excoriates the parts over which it flows. Dr. Richardson added that, when he had learned the nature of the active principle here, he might expect to induce erysipelas as he had induced endocarditis.

3. The last point to which he referred touched on the question of the general or local origin of inflammation. He re-

marked that the common sayings, that inflammation "is a blood-disease," that it arises "from a perverted nutrition," and the like, while they are terms expressing a kind of unsophisticated truth, are far too vague to become established arguments, and sink into doubt altogether before the reasonings, partly brilliantly correct and partly brilliantly absurd, of the ingenious Virchow and his local origins. He hoped the observations he had been enabled to make had come in at the right time, to explain what is general and what is local in an inflammatory act. He would put the position in the simplest terms at his command. Granting that a surface of skin or mucous membrane is uninfluenced by any extrinsic or intrinsic agent—the truism must be premised, childish as it is—the part does not inflame. Bring externally to that part a foreign substance, acetic acid, formic acid, mustard, a blister, hot water, and the part undergoes changes which are *purely local.* The general condition of the blood is natural; and this natural blood supplies all the elements of a local disease, even to suppuration itself, if the locally applied poison is applied efficiently. But change the mode of application, and assume that, as in the experiments made by the author, the producing agent is produced in the economy instead of the crucible, and is carried to the local part by the blood instead of the brush or the plaster. In the local upshot there will and can be no difference in the two cases; for the poison externally applied only acts powerfully in proportion as it is absorbed, and the poison brought by the blood only acts powerfully in proportion as it is circulated in the part. In both cases, therefore, veritable local changes will be produced in the affected part; the blood will not directly supply the exudation; the blood will not directly supply the pus if that fluid is formed; but both plastic matter, serum, pus, or aught else in way of product, will be local results in the strictest sense. There was, nevertheless, one general sympton which distinguishes the inflammation of internal from that of external origin, viz., the systemic disturbance. The circulatory fluid cannot be changed with an agent, nor can organic chemistry produce an agent capable of exciting local changes, such as have been depicted, without a forerunning expression in the way of rigor or increased heat, that there is such a malchemistry at work, and that the electrical equilibrium of the body is disturbed. This systemic indication may indeed in the end become secondary to the local mischief in importance; it may be primary, it may kill while the local change is insignificant. This difference as to general results remembered, the local upshot in the two stated examples is essentially the same.—*Brit. Med. Jour. 4th Feb.*

Dr. Simpson, in his clinical lectures on the diseases of women (London Medical Times and Gazette, Dec. 3), thus indicates the distinctive marks between peritoneal and ovarian dropsy:

1. That the dropsical effusion obeys in the abdomen the common laws of the gravitation of fluids to the most dependent parts.

2. That in cases of ovarian dropsy the fluid is inclosed within an isolated cyst or series of cysts, and does not move and gravitate through the general cavity of the abdnomen; and,

3. That on the contrary, the effusion in ascites or peritoneal dropsy is contained within the general cavity of the abdomen, and moves from one part to another of that cavity, in correspondence with changes in the mere position of the patient; while the intestines—distended with air, and specifically lighter—float more or less on the surface of the fluid, as may readily be ascertained by percussion. There is only, let me add, one class of cases where these physical signs may prove insufficient to guide you to a correct diagnosis—those cases namely, where the peritonitic effusion is associated with a tubercular affection of the mesentery and peritoneum, or the omentum has become the seat of adhesions, which prevent the bowels from floating forward when the patient lies supine. A knowledge of the patient's previous history, and her general constitutional condition, will often serve to enable you, however, to decide between the two forms of disease; for on inquiry you will find that when the collection of ffuid is ascitic in character, the patient is suffering or has suffered at some previous period or periods, from renal, or more frequently still, from some form of cardiac or hepatic disease, which you may still be able to recognise even after the abdomen has become much distended, and that the distension has begun at the most dependent part of the cavity and spread gradually and equally upwards; while in the case of ovarian dropsical collections, the anamnesis teaches that the disease first showed itself in the form of a circumscribed and rounded growth, seated originally in one or other iliac region, and at length attaining such a size as to fill up the whole cavity of the abdomen.

In the same journal there is an article on the "Relations of Belladonna and Opium," exhibiting the counteracting influence of opium in belladonna poisoning—and sustaining the now generally accepted opinion that they are mutually antidotal. The paper includes an epitomized statement of symptoms and treatment of ten cases of belladonna poisoning, all

of which were treated by opium. The following extract embodies the leading symptoms present, and the conclusions of the author:

The first symptom appears to have been dryness of the mouth and throat; next indistinctness of vision and dilated pupil; and, afterwards, in the more severe cases, delirium supervened. I found in one man, who had only swallowed one berry, the dry mouth and fauces without any affection of vision. The indistinctness of vision was the most persistent symptom; in all the cases it existed to a greater or less degree for several days, and the boy C. C.'s vision continues defective up to the present time. The delirium was of a busy, restless, vivid character, but generally rather pleasing than otherwise. The patients appeared to think that they were pursuing their ordinary occupations; one boy appeared eager in flying a kite; another pulled tables and chairs about, thinking he was working in a coal pit; the woman, E. W., appeared to be remarkably busy with her ordinary household duties. All their movements were of a quick, excited character strikingly resembling delirium tremens. There was no very marked vascular excitement, the skin was, in most of the cases, moderately cool, and the pulse rapid, but without power.

The remarkable tolerance of opium in these cases would appear to bear out the conclusion at which Mr. Bell, Dr. Graves, and others have arrived; that opium and belladonna mutually counteract each other. In none of the cases in which delirium was present, were the symptoms alleviated until sleep was obtained; and, after sleep, the patients felt comparatively well. The pupils were widely dilated so long as the delirium continued, and, when sleep was obtained, were either contracted or reduced to the natural size.

The Influence of Cohabitation in the Transmission of Phthisis.—M. Bruchon concludes an interesting memoir upon this subject with the following propositions:

1. Pulmonary phthisis may become communicated in the course of time from individual to individual under the influence of cohabitation, and the consequent intimate relations—a proposition equally supported by reasoning, and by facts.

2. The transmission is usually operated from the older to the younger subject.

3. In the great majority of cases it takes place from the man to the woman.

4. It is to be feared in proportion as the subject exposed to it manifests a predisposition to the disease.

5. The influences which contribute to the result are identity

of hygienic conditions, frequent absorption of morbific exhalations from the diseased subject, and fecundation by the latter.

Revue Medicale, 1859, tome ii. p. 88.

At the session of the Royal Medical and Chirurgical Society for 13th December, 1859, Dr. Habershon read a paper on the "Etiology and Treatment of Peritonitis," which he concludes with the following propositions:

1st. That peritonitis is never idiopathic in its origin, and that we do not find any such instance as acute disease of the peritoneum coming on from mere exposure to cold; in such case, the cold tends to render acute an already existing morbid state.

2nd. That the consideration of the origin of the disease, either in a local or general source, is the best guide to treatment; whether—*first*, from extension of disease from adjoining viscera, as the ovaries, bladder, intestines, perforations, or injuries; *secondly*, from blood changes, as occur in albuminuria, pyæmia, or erysipelas; and *thirdly*, from almost imperceptible changes, or deficiencies, in general health, as in struma, or cancer, or climacteric changes, or as a consequence of the hyperæmia of cirrhosis, or heart disease.

3rd. That, in the first form, perfect rest, the avoidance of food as far as possible, and the mode of treatment recommended by Dr. Stokes, in producing rest to the intestinal canal and peristaltic action, and diminising the collapse and prostration consequent on the disease—constitute the best mode of treatment; using, as far as need be, other means, as anodyne applications, local depletion; and, in many instances, also seeking to remove the exciting cause, as in cystic disease, etc.

4th. That where peritonitis is a symptom of blood change, as Bright's disease, pyæmia, etc., it may be best relieved by the treatment of the primary disease; but that here opium is sometimes of great value, and more effective without mercurial combination.

5th. That in the treatment of the third class, the consideration of the cause is also our best guide; that strumous and cancerous disease should be regarded in their general relations; and in those connected with hepatic disease, the remembrance of the condition prior to the supervention of the peritonitis should prevent us from using means calculated to increase the primary mischief; and that any benefit due to mecurial action may be attained without mecurial salivation.

6th. That, in general, the benefit ascribed to mercury in the treatment of peritonitis is not established, and may, perhaps,

be correctly attributed to the opium with which it is combined.

Dr. Copland said that the statement of Dr. Habershon could not be disputed, that in ninety-nine cases out of a hundred peritonitis, whether acute and chronic, was a consecutive, and not an idiopathic disease. In many cases, however, met with in children, it was difficult to determine what was the more immediate disease. It often arose from disorder of the digestive mucous membrane, from consecutive disease of the glands, especially the lacteal glands. In many of these instances the peritonitis was coexistent with tubercular inflammation of other serous membranes, as of the brain and pleura. The author's treatment appeared to be correct as far as it went. In the majority of cases salivation should be avoided, but there were some cases in which it was required. The author had overlooked a variety of medicines which were useful in cases of peritonitis consequent upon blood-contamination, especially the external application of turpentine by stupes or embrocations, which might go hand-in-hand with the opium treatment. In puerperal diseases scarcely a case could be successfully treated without the use of opium and the external application of turpentine. The most valuable portions of the paper were the statistics; as to the causation of the disease there was nothing new developed; and in regard to treatment the paper was very deficient.

REMARKS ON THE TREATMENT OF INFANTILE ECZEMA.

TRANSLATED FROM THE GERMAN, BY S. BRANDEIS, M. D.

It cannot be doubted that there are many chronic diseases of the skin which, without any external cause, are occasioned by constitutional disease, other than those which are caused by epizootic affections. This remark holds certainly true of eczema. Its frequent coincidence with exorbitant fatty accumulation, scrofula, rachitis, and its causal connexion with the diseases thus named, can be as little denied as that of scrofula with a certain form of keratitis, or that of rachitis, with bronchial and intestinal catarrh.

We do not pretend in this declaration to state anything new with regard to eczema, but we make it in order to connect with it some therapeutical and hygienic remarks, which may prove useful to the practitioner.

But before entering upon the question of the treatment of eczema, we intend to lay down those indications by which it

may be determined whether eczema is engrafted upon scrofula or rachitis, which, in early periods of its development, may not always be obvious and palpable.

If a child with fair complexion and thin flaxen hair, living under good management and proper diet, suffers from repeated bronchial and intestinal catarrh, or if at the beginning of dentition there be evidence of retarded ossification of the cranial bones without obvious cause; if it change temper and is repeatedly crying of nights, or drawing up its extremities with short, quick movements; if its evacuations are sometimes clay-colored and hard, and other times like scribbled eggs and offensive in odor; if the urine is loaded with lime deposits; if the child, though having a healthy appearance and wearing about with himself a heavy bolster of fat, rejects his food; if, under any of these circumstances, an eczematous eruption is making its appearance, we can safely pronounce it constitutional. In cases of this kind it frequently occurs that the parents unjustly blame the physician for driving the eruption away, and subsequent serious diseases are often regarded as the consequence of this repulsion. Such cases have, even among physicians, led to the erroneous belief of its pernicious retrocession, and the eczema has become a *noli-me-tangere* and a source of much injury to the health or even life of the child.

It is, therefore, a wise procedure in all cases of eczema engrafted upon scrofula or rachitis to call the particular attention of the parents to the necessity of a speedy cure, and at the same time to the probability that, with a further development of the constitutional disease (whether of scrofula, rachitis or hydrocephalus) the eczema may spontaneously disappear, but at the expense of the child's life.

The treatment of eczema with constitutional implication is properly divided into the external and internal, or local and systemic. First, as to the former: After the removal of the scabs which is most easily effected, by saturating them with oil and afterwards enveloping the parts covered by the eruption with gutta percha paper, which must be allowed to remain on for at least twelve hours; such means are to be applied as are most available for the relief of the disagreeable itching, as sprinkling the surface of the eruption with the pollen of the lycopodium or with starch; the application of cloths saturated with cod-liver oil; daily inunction with pure marrow and afterwards enveloping with cloths smeared with marrow, will sometimes accomplish this end with surprising promptitude. We must never with obstinacy restrict the patient to either one or the other of these means, but on the contrary all dermatologists advise us that one after the other must be tried in succession, and if all fail, other mild fats, as

cream, the oil of sweet almonds, or starch and the oxyde of zinc in proportion of four to one, are to be tried. We do not sanction the use of tar or cadin oil in cases of profuse secretion, as in eczema, rubrum or impetiginosum, but we do call particular attention to the importance of the employment of pure fats.

If we succeed by these means in assauging the irritation, especially if super-added to teething, and in arresting the profuse secretion, we may gain quiet sleep for our patient, and improvement of appetite and assimilation.

We must never lose sight of the great importance of strict attention to the diet, offensive, crude materials may produce active diarrhœa to which rapid collapse may inevitably ensue. As internal remedies the preparations of iron, and cod-liver oil, either separately or in conjunction are the most serviceable.

Of the ferruginous remedies the *acetic tincture of iron* answers best where there is habitual constipation, while the saccharated carbonate of iron will be best adapted to cases manifesting a tendency to diarrhœa. From three to six grains of this salt may be given per diem either uncombined, or with the addition of suitable portions of Dover's powder.

In the cold season cod-liver oil may be given in doses of from two tea-spoonsful to two table-spoonsful a day, either alone or with the iron.

In complications with bronchial catarrh the iron may be combined with senega.

Pure air, frequent ablutions of the body with cold water, a hard matress, light covering during sleep, and frequent change of wearing linen are very inportant measures in a hygienic point of view.—*Dr. Snuller's Anales for Diseases of Children.*

Glycerine, says M. Demarquay, applied to diseased cutaneous surfaces may modify their vitality as in eczema, may remedy the state of painful tension of the skin which exists in erysipelas, and the dryness of the epidermis in ptyriasis and ichthyosis; it opposes the thickenings and splittings of the tissues in lichen and psoriasis; it appeases the painful sensations of pruriginous affections; prevents the formation of scabs; acts favorably on the ulcerations of pemphigus and rupia; diminishes over-secretion from the skin, and destroys its bad odor.—*Medical Times and Gazette.*

CORRESPONDENCE.

WAVERLY, October 14, 1859.

Dr. Hewett,—My Dear Sir,—

In the course of our meetings this summer, I mentioned to you that I had been considerably interested in the observation of quite a number of cases of trismus nascentium during the decade just now closing;—that interest has been augmented of late by the occurrence of three other cases in quick succession. You, if I remember correctly, promised to either mention it in the College of Physicians and Surgeons, or to a few of our mutual friends, most largely engaged in the management of children, and give me the general result of their experience. Lest you may forget it, I send you this reminder, and mention one or two facts connected with the cases which seem to me not a little curious.

1st. In a practice of ten years in Henry county, during which time my obstetric cases were not less than an average of thirty annually, I did not see a case of the disease, whilst in ten years here, with an average of fifty cases per year, I have had seventeen cases of trismus.

2d. And most curious, my ordinary circle of observation is about ten miles in diameter. The locality in which all the cases have occurred, constitutes an oblong of about four miles in width and six in length, situated nearly in the middle of my field. Outside of this district I have not seen a case, and have not heard of one.

For twenty years or more the negro children born within this boundary have been quite subject to the disease. Several farmers who owned large families of slaves, raised but few slave children between 1830 and 1845. They would say, "We cannot raise negro children; they all die with the nine days disease." About that time an old woman of the neighborhood was the general midwife; and her professional duties were mainly restricted to the infected, or I should say, to the afflicted district. She lost cast, indeed, in her vocation, on account of the numerous cases that followed her deliveries. One of the oldest and most respectable physicians of this part of the cou try sought diligently for the causes of the old midwife's

misfortunes, and confidently believes he found it. He says in each case the old lady tied the cord so slack that its nerves (?) were merely irritated, not deadened; hence actual traumatic tetanus. Whether his is the true explanation I leave you to determine; but if it is, Madam Griffith's successors, of whom I am one, have also tied too loosely. For following me, quite a number of cases have occurred. All the cases I have seen were not of my own delivery—indeed, the majority of them were not, for, charging double the fee of my professional neighbors, the majority of the slave labors fall into their hands; yet the proportion of cases under my sole management has been as great as under the management of either of my neighboring medical friends.

Every case has belonged to the African race. Many have been disposed to attribute the disease, therefore, to negligent, ignorant, or careless nursing. At first I was inclined to adopt that opinion, coupled with the idea that a diseased state of the umbilicus, as abrasion, inflammation, irritation, or some other unhealthy condition was necessary to its production. But I was not long in satisfying myself that neither of these facts was constant. The children, a number of them, being nursed as tenderly, carefully, and cleanly, as a large number of the white children; and the navels, I have observed, have presented no constant indications. Some of them are well—healed up fully—others inflamed, indeed, in very varying and opposite conditions. Then I went off on the idea of persisting compression of the brain from some one of the cranial bones. In this view I was vastly strengthened by the announcement of the same idea by a gentleman of Tennessee, I think, who gave a number of cases, in which he thought it manifest, that the occiput increased the pressure, and that the compression was kept up by laying the children mostly on the back. It is singular that I have forgotten this physician's name, for I remember that I was quite grieved upon reading his paper that I had not published, when I first conceived the thought, and thus entitle myself to the paternity of the great idea.

But further observation has satisfied me that I did not lose much by dilatoriness. I have fully convinced myself that compression of the brain, from persistent bony depression, does not always produce the disease.

The inquiry as to what the accidents of labor may have to do with it has also been raised.

I have not been able to find any thing constant in this connection.

I have seen it following tedious and quick, laborious and easy, difficult and complicated labors, about in the same proportion. Nor do I find in the nervous, muscular, secreting, respiratory, or digestive system, any premonitory signs.

Twelve out of the seventeen cases have occurred in the six months comprising the last half of spring, all the summer, and the first half of fall. Five have occurred in the other half of the year. It begins never earlier than the fourth day, or later than the eighth. Mean duration, about two days. I have had two recovery cases. I attributed their recovery to full feeding. The mothers drawing the milk from the breast, and feeding them; and they are the only instances in which I thought sufficient nourishment was received.

One other point in the treatment, to which, however, I attribute no importance, but as it was practiced in both of the recovery cases, and has not been used by me at least in but one other case, may as well be mentioned—tobacco poultice over the abdomen.

The foregoing, I believe, sums up the essential particulars in my cases, and leaves me as completely at sea in regard to the disease as I was ten years ago, before I had ever seen a case.

Please mention the thing to some of our friends, and find out from them whether they often meet with them—what is the proportion of recoveries, etc., etc., and communicate to your obedient servant,

E. D. FOREE.

Messrs. Editors,—

Through the kindness of a medical friend in Louisville, I have had the pleasure of reading your reply to my article of November 21, 1859. Your first article reached me through Dr. Fishback, some weeks after its publication, which accounts for the delay of my article, and cannot, therefore, be regarded as so matured a reply as you would indicate. Nor did I see your reply in the News of 1st December for some weeks after its publication. But these are matters of minor importance.

Your readers cannot fail to perceive that your last article

has left untouched all the material points at issue; the great subjects of "Preliminary Education," for medical students, "The Necessity for Reform in the Mode of Teaching in our Medical Schools," and "The Violation of these Laws which should be Observed in both Mental and Physical Education, unvalued in the Present System of Lectures," are passed with scarcely a notice. Your reviewer cites us to Nos. 5 and 6 of News, in which he expresses the same views and feelings which are incorporated in our Indiana reports in my letter and communication to the News. In No. 5 he expresses the desire that the lay members of the profession will turn out in their strength, and bring their influence on the schools with the view of effecting reform in the schools. In his notice of the Indiana Reports, he says: "They will seek to effect reform in their own way, as correctly and as effectually as the committee could wish." There is surely an inconsistency in the two paragraphs, which I leave your critic to reconcile.

If I understand aright the meaning of the articles in Nos. 5 and 6 of the News, the necessity of reform in our medical schools is clearly and candidly admitted, and the laity are called on to aid in effecting this reform; in truth, the "perplexing question" is left for them to decide, on the principle that they are not biased in favor of any particular mode of teaching.

If these admissions are candid, (of which I have not the slightest doubt), wherefore the necessity of reviewing the Indiana reports in so severe and condemnatory a spirit? Many, very many reports to both State and National Societies have been couched in similar language, breathed forth the same spirit, advocated the same principles and aimed at the accomplishment of the same noble ends, and yet your critic whispers not a word, utters not a syllable against either language, spirit or principle. It is the discriminating spirit of condemnation against the Indiana committee of which we complain and of which we have a right to complain. Again, if these admissions are candid, why are they not acted on and carried out? The same admissions have been made for years past by many of the professors in our schools, yet do they cling to the old, unphilosophical system with as firm and unyielding a grasp as the miser to his bag of gold; they have written and spoken, and proclaimed aloud in favor of reform, and yet stand like

monuments of brass in the very road which leads to the desired object. Under these circumstances, with such admissions from such authority, and so little, yea nothing accomplished, your critic cannot be surprised that the confidence of the laity should wane and their hopes grow faint.

For more than ten years have our schools admitted the necessity of a more thorough preliminary education in our medical students, the necessity of reform in the mode of teaching and a higher standard of excellence in the members of the profession; and still there is no required change in the preliminary qualification of those who enter our schools, no reform in teaching, still do they grant diplomas which are but little respected by the people, and almost wholly disregarded by the highest tribunals of medical excellence known in our county, viz., the medical boards of the army and navy of the United States. It is a humiliating fact, that the diplomas granted by our medical schools are no longer regarded as evidence either of skill or high professional attainments.

Dr. Warren, editor of the Medical Journal of North Carolina, in an article on the Medical Bill presented to the Legislature of that State, remarks: "It is unnecessary to attempt a formal argument for the purpose of demonstrating how and why the standard of medical education has depreciated in this country, for the fact is universally admitted as it is deplored. To so great an extent has the rivalry between opposing schools reduced the standard of qualification among medical graduates, that the possession of a diploma is no longer regarded either by the profession, or the people, as a positive evidence of merit or respectability, but as simply conferring the title of Dr.; and in this estimate of the value of such a document, they are not only sustained by the action of the Army and Navy Boards in rejecting annually a large number of medical graduates, and by an acknowledgment on the part of the National Medical Association of the absolute necessity of some reform in the method of granting diplomas, but by the course of the Virginia State Medical Society, in proposing a bill which requires the *re-examination of all who desire* to practice medicine in that State."

But really, the necessity for reform is so apparent to every sensible, intelligent man, and especially to the profession; a

necessity so long and clearly admitted not only by your reviewer, but by most of the best and ablest Professors in our schools; that I cannot, in common with a majority of the profession, fail to feel and express surprise at the slow pace at which the schools are now moving for the accomplishment of the desired end. The laity have spoken in language clear, strong and decided, the State and National Associations have caught up and given still more impressive and significant utterance to the important fact; the schools have heard and acquiesced, but stand as immovable as the eternal hills. In this great battle for Medical Reform, the schools have their duty to perform. There is coming up upon them a current of doubt deeper far than ever swelled against them before, a current strong in learning, crested with genius, strenuous yet calm, in progress. And worse, there is an enemy within the camp, the ghastly fact that the schools have not the vital hold over the many which they once possessed; that many are now rather haunted by its ghost than marred by its presence. It cannot now be concealed that a great portion of the mind of the country, of those who make our laws, who distribute our justice, whose eloquence fills our courts, whose talent informs our press, whose energy inspirits our business, whose genius animates our higher literature, whose benevolence supports our charities, have lost their respect for our schools, and this principally from the fact that the schools have lost the charm and power they once possessed by standing still, heedless of that tide of progress in other departments of learning which was sweeping by in a deeper and still widening current.

Your Reviewer concludes his last article with the following sentence: "We dismiss this subject by the simple observation, that he is not generally the best bred man who first complains of the vulgarity of others, neither is he always the best educated man who first complains of the ignorance of others."

The force of this logic, or its bearing on the question at issue, I must confess my incapacity to perceive. If the honorable committee, with whom I acted, or your humble correspondent, have shown themselves either "ill-bred or ignorant," surely their reports and communications are not worthy the notice of a learned and dignified Professor in a Medical School. The insinuation is but a poor compliment to the members of

the Society who gave us the appointment; nor is it conclusive evidence of good breeding and intelligence on the part of a medical Professor to seek controversy with those so lightly esteemed. But I presume it is a matter of small moment as to the good or ill-breeding, the ignorance or intelligence of your Reviewer or myself. That is not the question—it is one far better suited to pothouse politicians in their scramble for office, than to the members of the healing art, the devotion to which is the standard of professional and scientific excellence.

The great question to be decided is, whether or not the Reform (the necessity of which is admitted) shall be effected, or whether all that has been said shall be as sounding brass and tinkling cymbals. Will your Reviewer add the weight of his ability, his learning and professional standing to the accomplishment of the desired end, or will he stand as he has done, shouting aloud for Reform, but at the same time damming up the tide which had issued so copiously from the American Medical Association. We pause for reply.

THOMAS W. FRY.

CRIMINAL ABORTION.

When wise and good men mount a hobby of moral-reform, as they frequently do, they seldom ride it far, alone. A host of other worthies, equipped in imitation, are ever ready to join the troop, and by a diligent use of whip and spur, soon appear at the very head of the cavalcade. The inconsiderate zeal of the recruits in turn communicates itself to their associates, and the more sober-minded reformer finds himself unconsciously involved in extravagancies and fanaticisms, that had no place in his original motives and purposes. Something of this kind is now going on in the medical profession, on the subject named at the head of my paragraph. I refer to it, not for the purpose of commending the movement, nor even arguing it, but, in a direct but humble way, to condemn and rebuke it. You may not, Messrs. Editors, admire the discretion of one who arrays himself against such a crusade as this, and if you allow me the favor a hearing in your pages, I beg you to protect yourselves by all kinds of caveats and disclaimers. As for your correspondent, he is quite in-

different to the hard things that may be said or thought of him in this regard, resting in the conviction that neither truth, honor nor morality can suffer in any open and fair conflict, even when conducted by as wayward an adversary as himself.

These fœto-philanthropists, to whose movement I refer, are reprehensible, in the first place, and especially, for invoking public scrutiny and animadversion upon a class of topics which acknowledge no legitimate censorship but the individual conscience. If there be anything more absolutely private, domestic, or personal than any other, it is the indulgence, regulation and economy of those passions and forces of our being which belong to the reproductive functions. The decencies of all civilized life, conspire with the intuitions of humanity, to place these things in a retirement which should be inviolable. Better than all argument with one who dissents from this, is to call on him to read Den's Theology, and, waiving the questionable authenticity of the book, ask him if his innate sense of propriety, not to say decency, is not shocked by the intrusion even of religion, in the persons of her human representatives, into these privacies of human conduct. M. Michelet, with much delicacy, indeed, and refinement, has sometimes transgressed in the same way, in his commendable efforts to improve the position of woman, and by this indecorum provoked for his "l'Amour" the severest, keenest criticism it has ever encountered. How much more intolerable, then, is the rude inquisition of our self-constituted reformers, thrusting themselves into the arcana of domestic life, in quest of confirmation of their fancied abuses, and coming forth charged with exaggerations and suspicions, cruelly calumnious of woman, who, on the contrary, should be protected and honored as the very basis and charm of our whole social system. Fallacious statistics have never been made to utter such abominable lies as when wrested and perverted by this fanaticism. Who believes, as they have been made to teach us, that our country women have become so degenerate and heathenish that their child-murders are already sensibly affecting the census returns of the nation, and seriously threaten the depopulation of the country?

But, what do the gentlemen really desire to effect, over and above the satisfaction of perpetuating a movement which enables them to make sensation reports and speeches, and to alarm the

public with the idea of half-discovered enormities perpetrated in our midst? They call for more stringent legislation. But the existing laws go so far beyond the dictates of natural justice, founded as many of them are upon dogmas of an effete theology, that they cannot be executed, and under more stringent ones still the real and necessary safe-guards of law would be as good as wanting altogether. The views of these philanthropists, of the jurisprudence of the matter, are not less extravagant than those they entertain respecting the extent of the evil. Who believes that, out of Boston, the hot-bed of all ultraisms, a dozen men can be found in the whole country, who will give the sanction of a conviction to a principle of law which asserts that to escape from burning shame, or to avoid the intolerably augmenting burdens of maternity by detaching an ovum of thirty days, is a crime meriting the same punishment as the murder of a man or woman amidst the relations and responsibilities of mature life, in the indulgence of malice, or for the acquisition of pelf? And this discrimination is most just—the acts are far from being alike in any view of them. They are as unlike as light and darkness, in themselves, in the consequences they induce, and in the motives which lead to them.

As for the medical profession, from the famous oath of "Hippocrates," in every exposition of medical ethics, and in every inhibitory regulation of a general kind which it has enforced on its members, it has borne testimony against the perversion of professional science or opportunities to acts inconsistent with the laws and welfare of society. Nothing is more certain to degrade a medical practitioner, in the estimation of his peers, than the knowledge or belief that he allows himself to parpate in any manner, in the misdemeanors we are contemplating. I was somewhat surprised, therefore, at the facility with which the American Medical Association was led into the supererogatory work of expressing its disapprobation of infanticide, and still more at its readiness to co-operate in so factitious a piece of philanthrophy as then invoked its aid. The Association had better keep clear of politics and legislation, or at least should consider the matter well, in the light of both policy and principle, before it becomes a suppliant to any legislative body. I am glad, however, that its mandamus, or instructions, to the State Societies has not had the effect to bring the business

before the Legislature of Kentucky, with all the sickening details which the zealous reformers are too fond of presenting, for the purpose of making out a case for more rigorous enactments. Before another session occurs I trust that these busy and philanthropic gentlemen will have found some other subject to interest themselves about. In the meantime, however, if they succeed in obtaining a hearing before the legislators of other States, it would gratify the curiosity of some of their medical brethren, if it be not advisable for their own vindication, to have them inform the tribunal, in what manner they obtained their knowledge of the extent and details of the iniquity they are exposing, and whether in the acquisition of that knowledge they were acting as physicians or philanthropists.

A reverend gentleman, who is a correspondent of another journal, on another subject, will pardon the liberty I take of using his signature.

ONE OF THE DISGUSTED.

Pharmaceutical Department.

By THOS. E. JENKINS, Pharmaceutist.

ADULTERATION OF MEDICINES.

Before the passage of the law appointing drug inspectors for all the ports of entry, and prohibiting the importation of spurious, adulterated, or deteriorated medicines into the United States, the country was flooded with a vast quantity of the vilest mixtures called drugs and medicines that could well be imagined, coming almost entirely from Great Britain and the continent of Europe, for there was little done in this country either in the way of powdering of drugs or the manufacture of chemicals and pharmaceutical preparations, until that protecting measure had gone into effect. That law stimulated home industry, and manufactories and mills at once established, and their products were able to compete successfully with foreign preparations of good quality: but this law only kept out *foreign* adulterations, it did not protect the lives and health of the people from home falsifications; it tended not only to stim-

ulate home industry in an honest and legitimate way, but it also opened a wider field for the operations of those unprincipled persons who are to be found within the pale of every trade and profession, and the belief is prevalent that there is not a hamlet in this broad land but what contains its share of the medicinal preparations and powdered drugs of some *enterprising* individual or firm engaged largely in the business of selling cheap drugs.

To know the extent of the adulteration of drugs and medicines, one has only to read the lengthy report of the committee on *home* adulterations made at the last meeting of the "American Pharmaceutical Association," the proceedings of which in part, were transferred to the pages of this journal, last year.

We now desire to show our readers in what manner and to what extent this nefarious practice is carried on, in respect to simply two articles of the materia medica—two perhaps of the most important agents for good in the hands of the skillful physician, and on that account more especially, should they be of the greatest purity and standard quality.

Dr. Arthur Hill Hassall, in a late work on drugs and their adulteration, says: "That out of *twenty-three* samples of opium analyzed, *nineteen* were adulterated, and four only genuine; many of these, as shown by the microscope, being adulterated to a large extent, principally with *poppy capsule* and *wheat flour*.

"That the amount of *alkaloids* varied from 2.7 to 14.0 per cent., or in the proportion of nearly one to five; that is, some of the samples were *five times as strong as others*."

"From the analysis of *forty samples* of *powdered opium*, it appeared:—

"That *thirty-one* were adulterated, and *one* only pure; the principal adulterations, as in the previous case, being with *poppy capsule* and *wheat flour*.

"That four of the samples were further adulterated by the addition of *powdered wood*.

"That the amount of *alkaloids* varied from 2.3 to 12.2 per cent., or in the proportion of nearly one to six. The lowest amounts of alkaloids furnished by the powdered opiums, were 2.3 and 3.2 per cent; these were, in all probability, exhausted opiums, which had been previously employed in the preparation of tincture."

The following remarks in reference to drug powdering, are from the pen of Mr. C. V. Hagner, formerly a drug grinder in Philadelphia:

"We sometimes receive vegetable substances, roots, barks, gums, &c., direct from the hold of a ship, or from damp cellars; at other times we receive the same articles from the garret of a store, where they may have been for a year or more. It is ridiculous to expect the same loss of moisture in both cases. Most of the articles we powder, contain more or less which we are obliged to dry out, and if we do not dry them artificially, when they are reduced to such minute particles as constitute a fine powder, the water would in a great measure escape by evaporation. This constitutes the greater part of the loss in the powdering of drugs. Some time back, I received a lot of bayberry bark from a house in this city, who had bought it without sufficient examination, for it had been completely saturated with water purposely, I suppose, by some 'financier,' to increase the weight. When I opened it and saw the condition it was in, I called the attention of the owner to it, but he had already paid for it. In drying, it lost over thirty-five per cent. Now, what a position I would have been in, had I been restricted to the *customary trade* allowance of a loss of two or three per cent. It would have taken a considerable quantity of 'veritable powder of post' (saw dust), to have made this matter straight.

"I attempted to unite to my other operations that of chipping and drying dye-woods, and ground in all from fifteen to twenty tons for different parties; and although the wood appeared to dry, it lost over two hundred pounds on each ton, caused by evaporation on being cut into fine chips, across the grain of the wood. Of course I received the usual amount of 'rowing up' for making such losses, so much so that I became heartily sick of the business, and sold at half cost, the apparatus I had erected.

"It is customary to remedy this difficulty, not with 'powder of post' but with '*aqua font.*'

"The important article of opium comes to us in very different conditions. I believe it is the general custom of druggists to keep this article in their cellars to prevent its drying and losing weight; some however, do not, particularly when it is

intended to be powdered; of course, the loss in the former must necessarily be greater than in the latter instance, and it would be perfectly unreasonable, under such circumstances, to bind the powderer to a regular per centage of loss in powdering opium. I have been informed, and I believe correctly, that there exists in some places a conventional rule of six per cent. in powdering opium; so far as I remember, I rarely, if ever, powdered it at a less loss than eight per cent., and sometimes as great as twenty per cent. I have examined my books in reference to the last twelve lots of opium powdered, and find they amount to 165 lbs 12 oz. received, and 142 lbs 2 oz. returned; the least being eight per cent., and the greatest near twenty per cent. The average loss being 14 lbs 5 oz. per cwt. Mr. Redwood gives the average loss in powdering this article in London, at 14 lbs 14 oz. on the 112 lbs.

"It would be an easy matter for any druggist to ascertain the loss in drying any particular lot of opium, by cutting a portion into very small pieces, and drying it sufficiently to make a *fine* powder. Yet, notwithstanding this simple method of ascertaining the fact, I have met with instances, where persons have sent their opium elsewhere to be powdered, for no other reason than that the loss being less than I made. Perhaps I might have satisfied them had I made use of the "powder of post," or something else, which is, and must be done by every one who powders ordinary opium at a loss of only six per cent. This, however, I have never done, and never will do. I do not profess more honesty than my neighbors; but if I had no scruples on the subject, I can imagine a case where I might make myself amenable to justice as a participant in causing the death of a fellow being, whose life might be lost for the want of a proper article being administered. I repeat, if there were no other motives, I would not, under any circumstances, make myself liable to such a charge. Opium is one of the most important of the drugs that pass through my hands. Every physician, druggist, and apothecary, knows the importance of having it right, and, so far as it depends on me, it shall be right, be the loss in powdering what it may.

"With a conventional loss of six per cent., there can be no uniformity in the article. A powderer receives a lot of opium so dry that it only loses six per cent. in drying. He receives

another lot that loses twenty per cent. To bring the loss of the latter to the same as the former, he must put in fourteen per cent. of adulteration, and then you have one article fourteen per cent. less in efficiency than the other."

In speaking of Ipecacuanha and its adulterations, Dr. Hassall says:

"From the examination of thirty-three samples of powdered ipecacuanha, it appeared:

That eighteen were adulterated.

That of these, one contained a large quantity of tartar emetic.

Two of the samples were adulterated with chalk.

Two were adulterated with wheat flour, etc.

We have now shown, that powdered ipecacuanha, like the other drugs, is subject to very extensive adulteration.

Ipecacuanha, then, one of the most important medicines in the whole Materia Medica, is now proved to be adulterated to such an extent as to render its effects, when administered, most unsatisfactory and uncertain. This uncertainty may be shown by reference to the action of two of the samples analyzed.

One sample adulterated with a very large proportion of chalk, was repeatedly administered in doses two or three times as large as those ordinarily prescribed, without the usual effects being produced;—in fact, the drug was almost inert, and this marked inefficiency of the remedy led to the detection of the adulteration.

Another contained nearly *fourteen* per cent. of *tartar emetic*. Now the effects resulting from the administration of ipecacuanha thus adulterated, would be twice as severe and violent as those which ensue from genuine ipecacuanha of good quality.

It is almost in vain that physiologists, pathologists, and chemists, are constantly contributing to the advancement of the science of medicine, since the results of their labors are practically defeated and set at nought by adulterations so scandalous as those revealed in the articles on "Drugs and their Adulterations" in the "Lancet."

The time must come, and that ere long, when offences of this description will be viewed in their proper light, and men

guilty of them will find themselves placed where they ought to be—at the felon's bar.

To adulterate medicines which are so frequently the salvation of life, is not a simple act of dishonesty, but it amounts to a crime of the deepest dye, for which every man guilty of it will one day be held answerable.

FERRI PULVIS—IRON BY HYDROGEN.

Much of the powdered iron used in medicine is made in Europe by mechanical means where labor is cheap, and not reduced by the chemical action of hydrogen on the oxide of iron at a lowered heat.

This operation is practiced in Germany and Switzerland by grinding iron filings under alcohol in an iron mortar, and requires the expenditure of much time and labor.

Iron pulverized by this method differs in one respect greatly from that made by reduction by hydrogen, and that difference is so easily made out that it may serve as a good and convenient test to distinguish between these two varieties.

Iron by hydrogen is sometimes spontaneously inflammable in the air, and is always combustible when ignited with a burning body, and although set fire to at one point only, the ignition will be quickly propagated throughout the entire mass, until the whole is brought to the state of oxide. Iron pulverized by mechanical means will not be ignited and burn in air. Therefore, iron powder by hydrogen is inflammable; iron powder by mechanical means is not inflammable.

A mixture of an equal weight of oxide of iron will not prevent the ignition of iron by hydrogen in contact with a red hot body.

BITTER TONIC FOR DYSPEPSIA.

℞ Tinct. Cinchon.
" Quassiæ - - a a f℥ii.
" Nuc Vomicæ - - f℥i.
M.

A teaspoonful three times a day in a wineglassful of sweetened water.

This is one of the best combinations of its kind; it is much prescribed by Dr. E. Wilson.

DR. S. G. MORTON'S TETTER OINTMENT.

℞

Calomelanos,
Aluminis, exsiccat. pulv.:
Plumbi Carbonat:
Ol. Terebinthin - - a a ʒii.
Ung. Simplicis - - - ʒiss.

Triturate the powders together until they are impalpable and thoroughly mixed, then incorporate them with the oil and ointment.

This is one of the very best ointments of its class, as proved by trials during a series of years.

The mode of using it is to apply it at night, wash off with pure castile soap in the morning, wipe dry, and dust with pure starch.—*Parish Pract. Pharm.*

SCUDAMORE'S GOUT MIXTURE.

℞ Magnesia Sulphatis - - - ʒi.
Aceti Colchici - - - - - fʒi.
Sirup Aurantii - - - - fʒi.
Magnesiæ Ustæ - - - - fʒii ϑij.
Aquæ Menthæ Pip: - - - fʒx.
M.

Dose, one to two teaspoonsful every two hours till four or six evacuations are produced in the twenty-four hours.

LIQUID SUBSTITUTE FOR DOVER'S POWDERS.

℞ Vini Ipecac - - - - m xvi.
Tinct Opii - - - - - m xii.
Spirit Aetheris Nit - - - fʒi.
M.

Take at one dose on going to bed.

"CHLOROFORM PAREGORIC."

℞ Chloroform.
Tinct Opii.
" Camphor.
Sp: Ammon Aromat - - a a fʒiss.
Ol Cinnamomi - - - g iii.
Sp: Vini Gallici - - - fʒii.
M.

Dose, half a teaspoonful or less in spasmodic affections of the stomach, cholera, etc. Several practitioners have used this preparation with favorable results in severe cases.

DRUGS MOST COMMONLY ADULTERATED.—Compiled by Arthur Hill Hassall, M.D.

ARTICLES.	ADULTERATIONS.	AUTHORITY.
Calomel	Chalk, Sulphate of Baryta, White Lead	Normandy, Bingley.
"	Fine Pipe Clay, Plaster of Paris	Wakley.
Red Precipitate	Red Lead	Bastick.
Mercurial Ointment	Clay mixed with Prussian Blue, Blue Clay	Neligan, Postgate.
Iodine	Water, Black Lead, Sulphuret of Antimony	Normandy.
Iodide of Potassium	Carbonate of Potassa	Hassall, Bingley.
Nitrate of Silver	Nitrate of Potassa	Normandy.
Quinine	Salcine, Quinidine and Cinchonine, Gum, Starch, Chalk	Hassall, Warington.
"	Sulph Baryta, Sulph Quinidine, Sulph Lime, Siliceous	Normandy, Sir J. Gordon.
"	Matta, Carbonate Magnesia, Sulph Magnesia, Sulph Soda	Letcheby, Bingley.
Nitrate of Potassa	Common Salt	Normandy,
Cream of Tartar	Chalk, Alum, Sulph Potass, Plaster of Paris	Normandy, Postgate, Calvert.
Magnesia	Lime, Chalk, Kavlin, Sulph Baryta	Normandy.
Spirit Nitre	Water and Alcohol	Squibb, Hassall, Thomson, Blythe, Bastick.
Sp. Ammon fort	Water	Blythe, Thomson.
Tinct. Ferri Chlorid.	Water	" "
Hydrocyanic Acid	Water	" "
Sp: Ammon Arom	Water	" Hassall.
Hydrochloric Acid	Water	Hassall.
Rhubarb	Wheat Flour, Turmeric	Warington, Hassall, Thomson.
Squill	Wheat Flour	Hassall.
Senna	Leaves of Cynanchum	Pereira, Bell, &c.
Copaiba	Linseed Oil	Postgate.
Essential Oils	Turpentine, fixed and Volatile Oils	Bastick.
Creosote	Carbolic Acid	"
Assafœtida	Chalk, Sand, and Clay.	Normandy.

This list might have been greatly extended, especially by reference to Pereira's Materia Medica, U. S. Dispensary.—*Am. Journal Pharm. and Pharmaceutical Journal.*

CRAB ORCHARD SALTS.

These salts constitute the residue when the waters of the Crab Orchard Springs are evaporated to dryness, and have gained, in the last few years, quite a reputation in the West as a medicine. They are, consequently, made on quite an extensive scale by various parties residing in the neighborhood of the source of the water.

Little, however, seems to be known of their efficacy as a medicine, or even of their existence, in the Atlantic States, judging from the unanswered inquiries which have appeared in some of the periodicals devoted to the spread of pharmaceutical knowledge.

Being near the spot, and having daily occasion to handle this late and popular saline aperient, enables us to speak advisedly of it, in reference to its source, mode of preparation, and the use it is put to.

Crab Orchard Springs are situated around the town of Crab Orchard, in Lincoln county, Kentucky, are quite numerous, and yield several varieties of mineral waters, the principal and most useful of which are the saline springs, yielding the salts.

These waters have been closely examined by Dr. Robt. Peter, the Chemist of the corps of Geological Surveyors of this State, whose analysis we give below:

"Sowder's Spring yields two hundred gallons of water a day. Specific gravity, 1.006.

One thousand grains of the water, evaporated to dryness at 212°, left 7.153 grains of saline matter, which was composed of the following salts:

	GRAINS.	
Carbonate of Lime	0.506	held in solution
" Magnesia	.375	by carbonic acid
" Iron	a trace	
Sulphate of Magnesia	2.989	
" Lime	1.566	
" Potassa	.298	
" Soda	.398	
Chloride Sodium	1.000	
Silica	.021	
Bromine	a trace	
	7.153	

The amount of free carbonic acid was not estimated.

CRAB ORCHARD SALTS.

The salts left by the evaporation of the water of this spring, constitute a moist, granular powder, with a slight brownish tinge, scarcely distinguishable from Havanna sugar in appearance. Per centage comparative as follow:

R	Sulphate of Magnesia, - - -	63.19
	Sulphate of Soda, - - -	4.20
	Sulphate of Potassa, - - -	1.80
	Sulphate of Lime, - - - -	2.54
	Chloride of Sodium, - - -	4.77
	Carbonates of Lime, Magnesia, Iron and Silica, - - - - - -	89
	Bromine, - - - - a trace,	
	Water of Crystalization a loss. -	22.61
	Total, - - - - -	110.00

This salt was obtained by boiling down the water in an iron kettle to a certain density, and then, after allowing it to stand for some time in a wooden vessel, the clear liquid drawn off from the mixed deposit of carbonates of lime, magnesia and oxide of iron, thrown down by boiling, was evaporated to full dryness.

Much of the Crab Orchard salt sold in Louisville has the appearance of New Orleans brown sugar, frequently mistaken for that substance by children, contains a considerable quantity of oxide of iron, and leaves a sediment of earthy carbonates, when dissolved in water, proving that it has not undergone the process of purification mentioned above. By some of the manufactures much attention is paid to this process of purification of the salt, so that it is entirely freed from oxide of iron and the precipitated carbonates, and is perfectly white; but whether the removal of these ingredients of the water is not injurious to the full medicinal virtue of the saline matter may well be questioned. We should much prefer to let the iron remain in the salt.

Although the sulphate of magnesia is the principal ingredient of this saline mixture, the presence of the other saline matters, and of the carbonate of iron, modifies greatly the action of that well-known salt, so that the medicinal effects, from the use of the waters or their salts, are considerably

different from that of a pure solution of sulphate of magnesia, and they are applicable to a greater variety of cases.

The medicinal virtues of these salts have been so highly appreciated of late, that many thousand pounds of them are annually prepared, and the demand in western drug stores and doctor's shops is greater for them than for the classic salts of Epsom. Physicians find these salts much less drastic, and more tonic, than pure unmixed Epsom salts, and more likely to act on the liver in the manner of calomel, when taken in small doses. They are especially efficacious in the treatment of headaches and other affections resulting from gastric disturbances. Several terrible cases of periodical headaches, with sick stomach and general derangement of the economy, which had resisted, for years, every other mode of treatment, were entirely and permanently cured by the use of these salts.

They are usually administered in one to three teaspoonful doses, thoroughly dissolved in a tumbler of water, and taken before breakfast. A very agreeable manner of taking this medicine, is to dissolve a dose in the smallest possible quantity of water, and fill up the tumbler from the jet of a soda fountain, and drink it while effervescing; or have your apothecary to prepare it in the form of bottled mineral water, each bottle containing a dose.

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS OF LOUISVILLE.

Reported by M. THUM, Secretary *pro-tem.*

Sixty-Ninth Meeting, Tuesday, January 17, 1860.

Dr. Hewett opened the discussion for the evening, viz.: Chloroform in Midwifery, by reading a very able and exhaustive monograph upon that subject.

Dr. Miller greatly distrusted that he could add anything to the very excellent summary just read. He, from its first introduction, had used chloroform moderately in the expulsive stage of labor. He doubted, however, the correctness of the President's view of its use in breech presentations. He understood the President to say that, as chloroform diminished the expulsive power, the uterus might not be able in these cases to expel the head. He thinks, at any rate, there is apt to be delay in

the expulsion of the head in breech presentations, seeing that the uterus can act but feebly upon the head (it being partly without the cavity of the uterus), conseqnently such cases always call for some assistance from the accoucheurs. He thinks it more necessary in breech than in vertex presentations.

The President had seen but few cases of breech presentations, then he had rendered assistance by bringing down the arms, putting his finger in the mouth of the child, and using traction, etc., but yet found some natural efforts on the part of the patient necessary—would not diminish, in any way, that power.

Dr. Miller found manual force very necessary in some of these cases to extract the head—the head had remained for hours within the pelvis after the expulsion of the body. This he had known occur in the hands of very fair practitioners.

Dr. Flint inquired if any of the fellows had used ether in the place of chloroform?

The President asked if any had witnessed the collapse, pallor and fearful syncope, which sometimes supervened upon the inhalation of chloroform?

Drs. Miller and Benson each had seen one case.

Dr. Wible, thought there were many relations in which the use of chloroform had not been discussed, coincided with the paper just read by the President; doubted whether death by chloroform begun at the heart; was of opinion that it arose from insensibility of the centers of the respiratory nerves; chloroform exhausts sensibility and relaxes the muscles—hence death as a consequence. Any treatment would be injurious which would excite, and consequently further exhaust the nervous sensibility, therefore dashing cold water in the face, ammonia, etc., would be contra indicated. He would lay his patient on his face and make gentle pressure upon the chest with alternations of relaxations. Dr. Bradford had found fanning the face had stopped the feeble respirations. He recommended inflation with the bellows, and gentle pressure on the sides of the chest.

Dr. Wible, in one sentence, would sum up his opinion. Stimulants exhaust; therefore the popular method which consists of their use is pernicious.

Dr. Flint desired, if the general subject of chloroform was up for discussion, to have investigated the relative merits of ether and chloroform. He once thought them each equally useful, equally dangerous, but was, however, changing his opinion. Now he considers ether much the safer and consequently much the better of the two.

Dr. Hoyt mentioned the fact of Dr. Pancoast, and other dis-

tinguished surgeons of Philadelphia, discarding chloroform entirely, resorting in all cases to ether. These gentlemen challenged the world to produce one instance of death having ensued from the use or abuse of ether. The younger members of the profession in Philadelphia were using it very generally in midwifery, the seniors not using either chloroform or ether.

The President stated that in the Crimean war chloroform had been given in thirty thousand cases and not one death had occurred among them from its use.

Dr. Hoyt confirmed the President's statement upon the authority of a medical friend who had been there.

Dr. Benson inquired if the President had not seen a published contradiction to that statement.

The President had not.

Dr. Flint had witnessed the administration of ether at the Massachusetts hospitals, little or no precautions being taken in regard to quantity, the handkerchief or sponge thoroughly saturated with the ether being placed completely over the mouth and nose, excluding entirely the external air. No death had ever occurred therefrom.

Dr. Miller had seen similar recklessness in the administration of chloroform here, and had heard of but one death from that cause. He doubts if ether be more safe than chloroform; thinks chloroform quicker and more convenient than ether.

Dr. Flint replied: nearly one hundred deaths have been attributed, and no doubt justly, to the use of chloroform, not one to the use of ether. He doubts if the anesthetic effect of chloroform is as profound as of ether.

Dr. Miller to Dr. Flint. Do you ascribe all the reported deaths from chloroform to it, or would you not consider some to arise from the shock of the operation?

Dr. Flint. The cases of shock have been eliminated from the list.

Dr. Miller. How can you discriminate?

Dr. Flint. By omitting those most likely to perish from shock.

Dr. Polk had seen much nausea following the use of chloroform.

Reported by JOHN THURSTON, M.D., Secretary.

SEVENTY-FOURTH MEETING, Tuesday, Feb. 21, 1860.

Dr. Bayless presented a tape-worm, in his estimation remarkable only from the fact of its narrowness, measuring one-eighth of an inch in diameter.

Dr. Flint reminded Dr. Bayless that the recent works in thus illustrating, presented such specimens.

The Secretary presented a specimen, showing the exudation upon the tonsils, uvula, and with the larynx of a negro child dead with diphtheria, with the following account of the case:

On the morning of the 16th, I saw, for the first time, a negro five years of age whose swollen tonsils were covered with an exceedingly offensive, dirty-whitish matter, which exudation was also evident upon the uvula, and occupying a number of the follicles at the base of the tongue. With but slight fever, there was considerable embarrassment of the respiration, great restlessness and depression of strength. The local application of the Nit. Silver, with the internal administration of the Tinct. Ferri. Mur., together with proper sustaining, measures produced no amendment, the patient grew worse till the evening of the 18th, at which time he died with evidences of the extension of the exudation into the air passages. The examination made on the following day, discovered the existence of the exudation to a considerable distance into the trachea. I doubt not it might have been followed to the bifurcation, if not traced beyond, and into the smaller bronchial tubes. I understood that the child had been unwell for four or five days before advice was desired, and that, like its mother, it had been subject to occsional attacks of sore throat.

Dr. Miller inquired the distinction between mere croup and diphtheria, and whether there is really any essential difference in their character.

The President thinks there is. He regards diphtheria as a blood disease.

Dr. Miller doubts whether there is any difference, and does not question that greater success will attend the treatment of these cases, when treated, as formerly, with blood-letting, mercury, antimony, etc., the search after solvents for its product causes us to lose sight of or to neglect the inflammation producing it.

Dr. Bayless is disposed to think that the liability of all ages to diphtheria and the comparative exemption of adults from croup shows a very marked distinction, except as to the identity of the diseases. He agrees with Dr. Miller in toto—would use mercury with the view of hastening that tendency to decomposition which obtains with these exudations when deposited on mucous membranes.

Dr. Wible doubts whether this is the same disease as that described in the English journals. He thinks we have had epidemics of this disease before, as in the winter of 1845–6. Authority speaks of an exudation upon the surface of mucous membranes, and if an artery within and beneath it, the latter requiring the use of the lancet, etc., the former condition marked by a feeble pulse does not require it. To advise bleeding

in either case, he thinks, is to advise the use of the most improper of remedies. Treated thus, he has seen them perish. You cannot cut short the disease by bleeding—dying not so much by occlusion from the membrane as by spasm. He would use soothing emollients, opium, etc.

Dr. Caldwell has seen no reason to draw the distinction contended for in any case that has fallen under his observation, nor do the symptoms, as presented to this club, furnish to his mind reason for such distinction—like the nice distinctions attempted to be drawn in many other diseases, it is all a myth. In all inflammatory conditions of the system where bleeding is indicated, he does not hesitate to resort to it, regardless of the name of the disease, nor does he permit a mere nomenclature to deter him from the use of mercury.

Dr. Flint has never met with a case of diphtheria, but from the description which he has seen, is disposed to regard it as a modification of membranous croup, the difference dependent upon some peculiarity of the system, which is comparable, if not identical with that condition in which instead of a plastic organizable lymph, an aplastic material is thrown out. There is congestion, but in all cases the difficulty seems to be, and is, that which first arrests the attention, viz., an obstruction to the respiration; remove this obstruction, and the patient gets well. To accomplish this, the action of solvents are too slow and uncertain, and to the mercurial action the same objection applies. The most rational procedure, and the quickest in his estimation, would be the use of emetics. From some experience of its efficacy in cases of true croup, would be inclined to give the preference to the turpeth mineral, the which being a prompt emetic, might also be recommended as superior to others of the class, in that in its use some alterative influence might be looked for.

Dr. Bayless is constrained to differ from Dr. Flint in regarding diphtheria as croup modified by cachexia; the cases he has seen have occurred in persons remarkably robust.

Dr. Flint reminded Dr. Bayless that he had only expresced a conjecture.

Dr. Miller, in referring to Dr. Wible's objections to the use of blood-letting remarked, that, suppose the disease has a certain course to run, is it wrong to curb it, to attempt to subdue it; doubts that art is so impotent; hopes and believes that it is not; if he thought otherwise he would quit the practice or turn Homeopathist at once; believes that by energetic action it is in our power to diminish the amount of the product and lessen its capacity for organization.

Dr. Hardin, in the treatment of a few cases of true croup he has seen, has relied upon emetics frequently repeated, act-

ing as a hindrance to the formation and concentration of the deposit; has avoided the use of antimony and other prostrating medicines; has used alum for its emetic influence, repeating it as often as the difficulty in the breathing became serous; thinks that the turpeth mineral, from its promptness as an emetic and for its alterative effects, would prove a valuable agent; thinks highly of the local employment of the nitrate of silver, frequently repeated.

The President regards it as hardly possible that so many writers can be mistaken with regard to the identity of the diseases often presenting early evidences of extreme prostration, and many dying after the obstruction to the breathing has been removed—no respecter of persons—he is compelled to regard it as distinct from croup.

Elements of Medical Jurisprudence. By Theodoric Romeyn Beck, M.D., LL.D., *and* John B. Beck, M.D. *Eleventh Edition, with Notes by an Association of the Friends of* Drs. Beck. *The whole Revised by* C. R. Gilman, D.D. J. B. Lippincott & Co., Philadelphia.

We are indebted to the Publishers for a copy of this excellent work, and though from circumstances not entirely under our control we have been delayed in the publication of such a notice of the book as we conceive it to merit, yet we can assure its publishers that we have made very great atonement for this tardiness by repeated and most cordial commendations of the work to the Students of both the Medical and Law Departments of the University of Louisville during the present session.

The dependency of the legal profession upon that of Medicine for enlightenment in many questions, both of criminal and civil interest, is now everywhere acknowledged. We cannot demand fuller confirmation of this statement than the fact that the city of New York has recently paid a member of our profession $3,000 for an analysis in a late criminal case, besides $300 for new instruments required. All intelligent lawyers acknowledge this dependency, and customarily solicit the aid of medical experts. They have ceased to say of us that medical witnesses are like old cannon, "as dangerous to friend as to foe," because they have learned that where they

have met with disappointment in respect to the bearing of the medical testimony, it has been more often due to their own erroneous inductions in relation to the scientific subject in contest than to the false conclusions of the witness.

We are not of those who tolerate any feelings like sectionalism in regard to medical literature; consequently it delights us to commend that which we find commendable among foreign books, as well as to condemn that which we esteem condemnatory, in the flood of cis-atlantic effusions, but we confess to a quickening of the pulse and an exhilarating feeling of pride when a book—the production of our own country, and of such acknowledged merit, that it has reached the eleventh edition, is laid on our table.

On two occasions recently we have enjoyed the gratification of receiving copies of two great achievements in American medical literature: One of these is Gross' Surgery, the other is the work now before us. Both these works will undoubtedly obtain trans-atlantic fame and circulation; and the latter must, beyond question, be accepted everywhere as standard authority. We regret that our limited space will not permit us to give our readers a sufficient number of extracts to afford them a proper conception of the work; they will, however, be able to form some idea of its plan and value by a reprint of the table captions to the chapters it comprises.

The first volume contains thirteen chapters, treating on the following subjects:

I. *Feigned Diseases.* Revised by R. M. Coolidge, M.D.
II. *Disqualifying Diseases.* " "
III. *Impotence and Sterility.* Revised by Austin Flint, M.D.
IV. *Doubtful Sex.* " "
V. *Rape.* " "
VI. *Pregnancy.* By J. P. White, M.D.
VII. *Delivery.*
VIII. *Infanticide.* By J. B. Beck, M.D.
IX. *Legitimacy.*
X. *Presumption of Survivorship.*
XI. *Age and Identity.*
XII. *Insurance upon Lives.*
XIII. *Mental Alienation.* By D. Tilden Brown, M.D.

The second volume has nine chapters upon the following subjects:

XIV. *Persons found Dead.*
XV. *Wounds on the Living Body.* By John Watson, M.D.
XVI. *Poisons.* By B. W. McCready, M.D.
XVII. *Irritant Poisons.* " "
XVIII. " " By Samuel St. John, M.D.
XIX. " " " " " "
XX. *Narcotic Poisons.* " " " "
XXI. *Narcotic Acid Poisons.* " " "
XXII. *Medical Evidence.* By C. R. Ginlam, M.D.

The chapter on Medical Evidence has been revised and corrected by Hon. John C. Spencer, so that the medical reader may assure himself that the instructions to the medical witness comprised therein have received the approbation of very high legal authority. The expert will find these instructions relating to his personal deportment and demeanor while on the witness stand of the utmost importance. A knowledge of them, and strict conformity with them, will spare him much mortification so often incident to this embarrassing position.

"It is very important," says Dr. Gilman, "that the medical witness should be aware of the somewhat peculiar position he occupies, and the two-fold character in which he appears, when giving evidence in a court of justice.

"He may be examined as (what is technically called) *a common witness*, merely to state, as any other witness might do, the facts that have fallen under his observation; but besides this, he is often, and indeed almost always, required as *a skilled witness*, technically *an expert*, to interpret the facts he has observed, or to give opinions on facts observed by others.

"As a common witness, the physician is only required to state facts. This he should do in the simplest and most intelligible terms, avoiding, as much as possible, the use of technicalities, and if compelled to use them, which an intelligent man very seldom need be, explaining them so fully that no man on the jury can fail to understand exactly what is meant. As a very general rule, it is better to confine your answer to the specific point or points embraced in the question. Sometimes, however, a fact may be known to the witness of which the examining counsel is ignorant, and which yet has an important bearing on the case. This should always be stated, but rather to the Judge at the close of the examination or cross-examination, than to counsel."

One other extract in reference to this point is all we can admit:

"Those who are charged with the administration of the law demand, as they have a right to do, the opinion of the expert on a certatn state of facts. They do not require him to state what the truth is, but what *he thinks* it is. Now if he gives his honest, unbiased opinion, he is clearly not responsible for the use which the law may make of it. 'But,' he says, 'I may be mistaken.' Here again is a great error. This is precisely the thing about which you cannot be mistaken. If you swear that you saw John strike Peter, you may be entirely mistaken; it may turn out that it was another man much resembling John that you saw. Cases of mistaken identity are common. But if you swear that, in *your opinion*, the blow John struck was the cause of Peter's death, you cannot be mistaken. That is your opinion, and whether sound or not—a thing for the jury to decide—still it remains your opinion, and that it is so, is all to which you swear.—C. R. G.]* The last source of difficulty in testifying to matters of opinion to which I shall advert is, that medical men are sometimes tempted to testify to an opinion, when, in point of fact, they have none. A man is asked his opinion as to the nature of a disease, the import of a symptom, the probable effect of a remedy—he knows nothing about it, and consequently has no opinion. But he is unwilling to say so. 'If,' he reasons, 'I confess that I do not know this, they will think I know nothing.' Very bad logic. The better reasoning is: 'If you say that you do not know what you do not, your claim to know will be readily admitted whenever you make it.' Having thus indicated the chief difficulties in the way of the skillful witness, we will add a few hints on the best way of avoiding them. First, study accuracy and definiteness in the formation of your opinions; never rest satisfied in diagnosis with vague generalities—'it is something of that sort,' etc. When your opinions are formed, give them to the court just as they are; do not, by vagueness of expression, try to make your statement cover all the ground, or mean every thing or anything; but give them such terms that they shall

* Mr. Abernethy was sharply reproved for refusing to give his opinion in a case, and told by the judge, "You were called for the purpose of giving an opinion."—(London Lancet, vol. xii. p. 227.)

express exactly what you mean—nothing more, nothing less. As to bias, whether affecting the statement of facts or (what is much more likely) of opinions, it is only to be avoided by constant watchfulness and rigid self-discipline. The danger of allowing one's self to take sides in the cause as to its merits, is well shown by the expressions which fall unconsciously from writers on medical evidence. Even Guy says: 'No man can be justified in consenting to *appear for either party*, until having heard all the facts on which his opinion must be formed, he can conscientiously give evidence *in favor of the party for whom he is retained!*' Here it seems to be taken for granted that the witness must 'appear for one party,' that he is 'retained for that party.' This obviously strikes at the root of all correct principles of medical testifying. The witness is not retained for one party; he does not testify for or against one or the other party. He gives the facts if they have fallen under his observation, and his opinion upon any supposed state of facts. A good plan, I think, is to talk not exclusively to the lawyer or the witnesses on one side, but hold, if possible, free intercourse with those of the other party. Hear what they have to say and try the effect on your own mind of looking on the facts of the case from *their stand-point*."

Were these admonitions generally understood and followed by the medical profession, it would no longer incur the flout of an eminent jurist, who said that he had always remarked a singular harmony between the views of the medical witness and the counsel who had procured his presence, though a certain degree of coincidence will very often be found to exist, inasmuch as lawyers will seldom ask for the presence of a medical gentleman, unless they have good reason to suppose that his testimony will be favorable to their client.

Transactions of the Medical Society of the State of New York. 1859.

This is an exeedingly interesting book, containing not only a great number of papers upon a variety of diseases, but a history also of the formation of medical societies in that State, together with liberal extracts from the addresses of Presidents from 1806 down to the present time. The list of its honorary

members contains many of the first names in medicine—names which are the pillars of fire, by which men of shorter sight have been led through terrible trials, lo! these many years—Rush, and Nathan Smith, and Warren, and Mott, and Chapman, and Physic, and Drake, and Mussey, and Cross, and Eberle, and Meigs, and Bigelow, and Wood, and Dudley, and Gross, and Hooker, and others of like fame.

Among the papers of especial interest just now, is one by Dr. S. D. Willard, of Albany, upon that very formidable disease which is threatening a descent upon us—Diphtherite. Dr. Willard speaks of it as bearing a marked resemblance to Cynanche Tonsillaris and to Croup, but regards it as independent of either. "It prevailed among children mostly under twelve years." "The membrane rapidly extends upon the palate, tonsils, rima glottis, into the larynx and trachea, and the patient dies after the manner of croup." In some instances the fatal cases were rapid in their progress, and "terminated in two or three days." The average duration is from seven to ten days. "It is a disease affecting the whole system. The strongly marked tendency to debility calls early for stimulating and invigorating treatment."

Local treatment: Nitrate of silver, mineral acids, and chloride of soda, have all been used with various degrees of success."

This volume is altogether too large to justify any mention of its separate papers, and we close it by a word in regard to the address of President Brinsmade. Its subject is "Medical Associations," and, as a starting-point, he quotes an old proverb to the effect that "one man is no man." Man must come in contact with his fellow, in order to the development of all that's in him. Isolation in any phase of life will wither and dwarf some part or another of that glorious organization, which, in its totality, we call man. In social life he becomes a cynic; in professional life he becomes arrogant. "He needs the stimulus of collision with those who have taken different views from himself to awaken him from his aimless day-dreams."

S.

Fortieth Report of the Board of Visitors of the Kentucky Institution for the Education of the Blind, to the General Assembly of Kentucky, for the year 1858 *and* 1859.

We have examined this report with great interest and satisfaction, and are pleased to find ample evidences of the continued prosperity of an institution which reflects so much credit upon the liberality and beneficence of the State of Kentucky. No similar institution in the United States surpasses the Kentucky Institution for the Education of the Blind, either in the beauty and healthfulness of its situation, in the architectural symmetry, ample capacity, fitness of plan, and superior workmanship of the noble edifice erected by the munificence of the State, in the excellence of the management that has always presided over it, or in the triumphant results that have attended its ministrations in behalf of the blind. Every Kentuckian can look upon this noble charity and feel proud of his citizenship. Great credit is due to the benevolent gentlemen who compose the Board of Visitors, and to the Director, B. M. Patten, Esq., whose eminent capacity for the position he fills has presided over the Institution from its earliest inception to the present time. From the report we learn that "The number of pupils connected with the Institution in the year 1858 was 56, 21 males and 35 females. The number in the year 1859 has been 51, 16 males and 35 females. All the pupils, with one exception, are in the enjoyment of good health; and none have been removed by death since the last biennial report was presented to the General Assembly. The remarkable preservation of the lives and health of the pupils demands renewed expression of gratitude to that Providence that has so long watched over this Institution, from which only three pupils have been removed by death during the eighteen years of its existence."

To our medical brethren in all parts of the State, we feel great assurance in saying you can, with the utmost confidence, recommend all blind children that may come under your observation to be sent to the Kentucky Institution for the Education of the Blind. Their health and comfort will be abundantly provided for, their minds will be thoroughly cultivated and refined, and they will rapidly become intelligent, useful, happy members of society. H.

On Criminal Abortion in America. By Horatio R. Storer, M.D.

It is astonishing how little importance is attached by many very sensible persons, male and female, to the practice of abortion. Respectable and well-educated women will ask for an abortion with almost as much nonchalance as for a purgative pill. It is to be feared that, for this extraordinary state of things, the profession is, in some measure, responsible—negatively so, in our fastidious silence upon a subject always delicate, and sometimes forbidden—positively so, in suffering the love of money to override the highest dictates of humanity.

The legislation, too, of the country at large is wonderfully at fault in failing properly to recognize the crime, and attaching adequate penalties to its perpetration. Thus, in the absence of very decided steps in the right direction, public opinion has not been made to feel how monstrous a crime goes almost unrebuked.

Dr. Storer has devoted more than ordinary thought to this subject, and in a pamphlet of 100 pages has discussed, with marked ability, its bearings upon morals, law and medicine. How wide an interest the subject has, is well expressed in the dedication, "To Physician, Attorney, Judge, Juror, and Parents," and is one of the few medical productions whose reading will fully repay any one of all these classes. It should not only be read, but should be preserved and re-read until the whole people are imbued with the thorough soundness of its teachings. S.

Botany as an Ally of Medicine. A Lecture Delivered to the Medical Society of the University of Nashville, Dec. 2, 1859. *By* George S. Blackie, M.D.

This is one of the most beautiful addresses it has been our fortune to see this many a day. It does not deal with Botany simply as a matter of flowers and poetry, but claims for it, and rightfully, too, a much higher rank among the studies of men; a science, indeed, bearing a close relationship to the great art of healing.

While it would, perhaps, be impolitic to crowd into the two

sessions of medical pupilage any other studies than such as are now embraced in the course of the best schools, Dr. Blackie has very properly suggested a period which might be profitably spent in acquiring a knowledge of this beautiful and valuable study—that period, namely, long and very trying to the young medical man—which elapses before bedside cases occupy much of his attention. Two or three hours each day during this "winter of his discontent" would tend largely to make "glorious summer" for his after life. It would not be to him simply a glorious summer of *flowers*, but might become a glorious life of *facts*. It would elevate his tastes, purify his morals, enlarge his brain, and make him a better doctor and a better man.

We commend the address to those who have never known how wide a field it opens up close alongside of that great domain which the good and the true are wont to cultivate for the healing of the people. S.

A FATAL CASE OF PHLEGMONOUS ERYSIPELAS.

BY GERHARD C. PAOLI, M.D., OF CHICAGO.

(ORIGINAL.)

M. V. S., æt. 29; carpenter; phlegmatic temperament; consulted me at my office on the 8th of December; much swelling of right hand, extending from tips of fingers to middle of antibrachium, principally, however, confined to the hand. The skin was red, somewhat œdematous, distended, and somewhat hard to the touch. Upon close examination, fluctuation was perceptible in the fore-finger, and upon opening it, a milky serum was discharged with very little pus. Patient complained of aching pain in the hand; pulse normal; tongue clean; bowels rather constipated. He knew no cause for the disease, and had not received any injury. He stated that it had commenced eight days before he called on me, and that the swelling had gradually increased to the condition described. He had taken medical advice, and poultices had been applied. Ordered a continuation of the poultices, and two grains of quinine every other hour; also, Pil: Hydrargyri, and enjoined quiet and confinement to his house.

Dec. 9th. Patient returned, stating that business compelled him to go out. Pain unabated; same character of discharge from the opening made; bowels had been moved.

Dec. 10th. Tumefaction had not increased; pulse normal; tongue clean.

Dec. 11th. Pulse normal; bowels regular; great discharge of pus from the opening; much thirst and want of sleep. Ordered Dover's powders at night.

Dec. 12th. Had been delirious in the night; pulse 120; tongue dry and coated; tenderness over the liver.

Dec. 13th. Comatose; in the evening he died.

As the diagnosis of phlegmonous erysipelas is of very great importance, it may be well to offer a few remarks concerning this case. The cause was not appreciable, and whether the disease was idiopathic or symptomatic, I am not prepared to state.

The skin of the affected part was hot, red, distended, and excruciatingly painful. But the character of pain differs in different kinds of inflammation. In the internal, or, so called, occult forms, there is no pain. In those of serous membranes, particularly of the arachnoid, there is no swelling or distension of the adjacent cellular tissues. When phlegmon is limited to a small surface, as in furunculus, anthrax, etc., the fever is local, and seldom produces general symptoms; but when an extensive surface is involved, symptomatic reaction ensues, and the fever becomes general. Just here I may call to mind the fact, that frequently on the third or fourth day after the performance of surgical operations, a fever ensues, which is easily recognized when simple and uncomplicated, but very difficult to recognize when, as is often the case, it is connected with internal inflammations, as hepatitis or pneumonia. If the internal inflammation be not accompanied by local pain, and certain other symptoms be wanting to determine its presence, the complication causes the physician great embarrassment, and it thus becomes impossible to determine the cause whence the fever proceeds. Subsequently other symptoms become developed, which, perhaps, give positive evidence of internal inflammation, but then, too, perhaps the disease has passed beyond the reach of medical science. Phlegmon may be confounded with abscess in the cellular tissue, lymphangitis, and erysipelas ambulans. This is particularly true of the latter; but, in regard to the symptoms, we can draw a certain line of demarkation between them. Erysipelas ambulans has the peculiarity

of resolution in one part, while advancing in another. A characteristic of phlegmon is, that it is not wandering, and tends rather to increase than diminish in intensity. In common erysipelas, fever precedes other symptoms, and in the erysipelas ambulans, a high fever almost immediately supervenes, but in phlegmon the fever does not make its appearance until the disease has somewhat advanced.

Concerning the cause of death in the case reported, I am inclined to believe that the primary inflammation produced phlebitis. Experienced authors, however, say that in the majority of those who die in this disease, the cause is not attributable as much to the phlegmon, per se, as to imprudent exposure, which creates inflammations in the abdominal organs and lungs, as they have found in numerous cases abscesses in the liver and collections of pus in the kidneys. In the case under consideration the liver was implicated. I could not obtain the privilege of making an examination of the body, which I much desired to do.

Editorial Department.

For a very obvious reason, we have but little to say in reply to the communication of Dr. Fry. There remains no issue between us, as he has carefully and, we doubt not, penitently pondered upon the harshness of his report, and only attempts an indulgence in like severity now, that he may descend as gracefully as possible, and compromise himself no further with those of his professional neighbors to whom he applied such modest epithets.

Dr. Fry must be morbidly sensitive if he imagines that we intended to apply the term "ill bred" to him or to the committee with whom he acted. No such thought was ever conceived by us, but yet we must except to the charge that we have "sought controversy" with the gentleman. We do not desire to measure arms with those who think as we do and merely happen to differ from us in their mode of warfare, but

we cannot submit to the charge of "shouting aloud for reform, but at the same time damming up the tide which had issued so copiously from the American Medical Association," and in this connection Dr. Fry need not "pause for reply." First, then, we have not shouted aloud for reform; but, secondly, we wish for the credit of the Association that some of the streams which issue from it could be dammed up. To be efficient, that Association must be made national. As it is, it is the creature of the city in which its last meeting is held, and hence we must expect to see it occupied with the mint, anise and cummin, and neglecting the weightier matters of the law. It is becoming an itinerant surprise party, and hence fails to receive that homage which stability and permanence inspire. But again, we except to the assertion that we have, even with such views, ever dammed up or attempted to dam up any tide emanating from that honorable body which looked toward a reformation of the present objectionable system of medical education.

At another time, and in another connection, we may revert to this subject, as it has recently presented phases which may interest our readers.

Many of our readers are apprised that there is in Iowa, one Dr. Ignatius Langer, whom it delighted the American Medical Association, on the occasion of their last annual meeting, to honor by placing him at the head of a committee on subcutaneous injections, and especially, we believe, the treatment of malarial fever by quinia thus displayed. Now it seems that that Dr. Langer, in addition to the arduous duties one would suppose a report on the above named subject would entail, has found time to occupy both his brains and hands in another species of practice even more novel to American physicians than the introduction of remedials into the cellular tissue. He has attempted, and alleges that he has accomplished, the conversion of a malposition of the fœtus in utero to a normal and favorable one by manipulation and force brought to bear upon it through the abdominal coverings. For this assumption on the part of Dr. Langer, the Scott county Medical Society has expelled him, alleging in the charges brought against him on trial for expulsion:

That he has violated the general spirit of the code by his practice in a case of pregnancy which occurred in this place, and in which for several days prior to the day of confinement, he made certain unwarrantable examinations and manipulations, with the pretended object of correcting the presentation of a fœtus in utero, deceiving the patient by informing her that the child had an unnatural position and that it became necessary to change it, a practice purely deceptive, an impossibility in fact, and in its details highly indelicate and dishonorable.

With this act of expulsion of Dr. Langer by his confreres, we have not one word of fault to find. They had good opportunity to observe and know the man, and if his deportment was quackish they were right in expelling him. But while we utterly disclaim any knowledge of Dr. Langer's private or professional character which would justify us either in impeaching or defending it, we reserve to ourselves the right to say something in reference to the various strictures and coarse epithets which have been unsparing bestowed upon this ill-starred advocate of the doctrines of the German schools. The conduct of Langer is asserted to be "disgustingly indecent," "highly indecent and unwarrantable," prompted by "the morbid, lustful desire of lascivious libertinism," and he is variously characterized as "an arrant, unblushing, grossly indelicate charlatan," a "quack, lunatic or fool," according to the particular taste of the critic. We have long since heard of an apothegm to the effect that, if you start a dog down a hill every bystander will facilitate his descent with a kick, surely the excommunicated Langer must be conscious by this time of the application of this ruling to the human species and its special relevancy to him. Leaving out of view the reported attendant circumstances which we admit have a strong odor of quackery, we see nothing in the attempted operation itself, which, if attacked at all, should not be attacked independently of the personal character of the operator himself—nothing which in justice demanded that the unfortunate *palpator* should be degraded to such an irretrievable depth of professional infamy. We are prepared to give our unqualified condemnation to all attempts to procure patronage by an assertion of capability to ascertain and rectify fœtal malpositions at any stage of pregnancy prior to the inception of labor,

as we are also prepared to condemn precisely the same spirit actuating the man who claims through the secular press great proficiency in any recognized operation, Wutzer's, or any other, for the purpose of procuring fame or replenishing his pockets. Then if quackery be not fastened upon Langer in this latter aspect he derives sufficient countenance from authors of established reputation to protect him from complete overthrow in his opinions of the competency of the operation. Cazeaux says:

It is often possible to detect a position of the trunk in the latter stages of pregnancy, by the shape of the belly, the longest diameter of which is then transverse; by the child's head, which is very clearly felt in one of the iliac fossæ, in women whose abdominal walls are but little distended, are thin and easily depressible (although in two cases, reported by Duges and Velpeau, it was felt above the pubis); and by the impossibility of reaching the presenting part of the fœtus with the finger introduced into the vagina. All these circumstances render the diagnosis of the position quite easy. Now, if the child be movable in the amniotic cavity, it is very possible to bring the head to the superior strait. For that purpose, after having corrected the uterine obliquity, if there is any, it is requisite to press up the side of the uterus to which the infant's breech corresponds, with one hand, and to push back its head with the other, in the direction of the superior strait. Well-directed external manipulations have not unfrequently proved sufficient to convert the position of the trunk into one of the vertex. The most difficult point is to keep the head thus reduced, for the child often regains its primitive position after the reduction.

We scarcely know whether the charges of "indecency," "lustful libertinism," etc., are meant to apply to specified acts on the part of Dr. Langer attendant upon his attempted reduction of fœtal malposition, or to the attempt under any circumstances. If the former be true we have no defense to offer; if the latter, we cannot see in the operation itself any essence of indecency so flagrant as to merit the denunciations of all medical Christendom. Have not all these upraising of hands in modest horror, and cries of indecency, and alleged incentives to libertine conduct, been expended upon the application of the vaginal speculum to the treatment of female diseases? And who will dare declare that external manipulations of the female abdomen are not as decent and warrantable as disclo-

sure of the cervix uteri and wall of the vagina by means of the speculum, provided, always, that in both instances the operator is actuated by the same spirit of purity and professional integrity? In each instance the patient is induced to make sacrifice of natural female modesty by promise of future safety or health, and if assurance could be offered her that either palpation of the abdomen or exposure of her sexual organs would alike invest her physician with sufficient knowledge of her case to enable him to afford relief, and the choice of the two modes of examination be left to her, we fancy her decision would be quickly made. But then it may be alleged that Langer found no malposition to rectify, and that his examinations were wholly needless and unwarrantable. How often, we ask, do those who habitually employ the speculum search in vain for the *promised* ulceration of the cervix uteri? And when in each case the exploration has been needless, and, consequently, unwarrantable, which has committed the more violent, as well as the more gratuitous assault upon female modesty or professional decency—he that "fumbled" over the abdomen, or he that intruded his espionage into arcana which should be held sacred from wanton observation? Then admitting the practicability of this version by external manipulation, it is alleged that the palpation and succussion necessary to effect it would be disastrous to the offspring. But how many embryonic lives have been sacrificed to that culpable spirit of research which so often prompts the womb specialist to an unnecessary sounding for the depth of the uterine cavity; or, in efforts to rectify real or imaginary deviations of uterine axis by introduction of the uterine sound (or as Dr. Lee terms it, the "uterine poker,") will never be known unless the light of the last day reveal them charged to the account of unpremeditated abortionism. In conclusion, we fearlessly express the opinion that if there is quackery to be attached to such attempts to rectify fœtal malposition previous to labor, it belongs to the attendant circumstances and spirit animating the operator, not to the act itself, and although we do not intend to inculcate the common adoption of this ante-parturient search after abnormities of position, we shall reserve to ourselves the right of instituting abdominal palpation whenever we consider

it called for, without the fear of medical societies or dignitaries of medical associations being before our eyes.

Drs. F. E. Oliver and Calvin Ellis, have succeeded Drs. Morland and Minot in the editorial charge of the Boston Medical Journal. From our knowledge of their ability, we do not doubt that they will sustain the well merited reputation of that periodical.

We congratulate the friends of the University of Louisville upon the re-election of Messrs. W. S. Vernon and W. E. Glover to their former positions in the Board of Trustees. The former has been, since the inception of the institution, its firm friend, and still retains, unshaken, his fidelity to its interests, while the latter is, in his adhesion, equally true. We have been informed that the names of Dr. Henry Miller and Mr. A. L. Harris, were placed in the opposing ballot.

Kansas City Medical and Surgical Review.—We have received the first number of the "Kansas City Medical and Surgical Review," edited by G. M. B. Maughes, M.D., and T. S. Case, M.D., bearing the date of January, 1860. This is a bimonthly journal of 48 pages, and is not only of excellent appearence as it regards mechanical execution, but bears unmistakable evidence of editorial capability and vigor. We place it, with great cheerfulness, upon our exchange list.

Louisville Medical Journal.—We have also to acknowledge the receipt of the "Louisville Medical Journal" for February, a new medical periodical in this city, edited by Thos. W. Colescott, M.D. J. R. Timberlake, M.D., Publisher and Proprietor. Most of our readers are already familiar with the talents and reputation of Dr. Colescott, so that it is quite unnecessary for us to exspend eulogies in that direction. The first number contains an article from Dr. Miller, and one from Dr. M. Goldsmith. We welcome the Journal to our exchange list, and the editor again to the editorial corps.

We have also to announce the "Chicago Medical Examiner," with Dr. N. S. Davis at its head. This is the organ of his pet scheme, the Lind University, and we have no doubt the energy and merit of this gentleman will ensure a large degree of success to both enterprises. We do not know but that we may inadvertently have omitted notice of his associate editor, but we received but one number of the Examiner, and that speedily disappeared from our desk, so that we cannot recall to mind whether Dr. Byford or Dr. J. M. Steele, or both, are on the cover as associate editors. We are always ready to welcome Dr. Davis into our professional circle, for he has great zeal and earnestness, and has, we are persuaded, the solid advancement of the profession very much at heart, however much his peculiar ideas of procuring that advancement may be open to criticism.

Corrections.—In our January number, the name of the author of the Report on Vital Statistics was by some mischance omitted. In this instance, however, the omission was of but little consequence, since there are but few medical readers in our land who would not at once have assigned the report to its true authorship. There are but few besides Dr. Sutton who are both sufficiently capable and pains-taking to prepare such a paper.

A typographical error also occurred in Dr. H. L. Given's report on Vaccine Virus, published in the 23rd No. of Semi-Monthly Medical News, 1859, and as this is a subject upon which precision is important, we call notice to it. On page 717, bottom line, it should read 14th instead of 4th.

Coroner's Inquests.—The Legislature of Kentucky has passed a bill authorizing Coroners to employ physicians, as skilled witnesses, at inquests, and, of course, providing for their compensation from the County treasuries.

We regret to be compelled to announce that our January issue is entirely exhausted. Our mail list had increased until

it numbered beyond our expectation, and we are pleased to add a greater influx of subscribers occurred than we had anticipated, and now the demand exceeds the supply. We would feel greatly obliged for the return of copies of the January edition, and would, wherever permitted, allow adequate remuneration either by credit or remittance.

Kentucky State Medical Society.—The annual meeting of our State Society will be held in Bardstown, commencing Wednesday, the 18th day of April. We bespeak a full attendance, and do most sincerely hope that the Profession of Kentucky will not suffer their State Society to dwindle into non-entity for lack of interest. Bardstown is now in communication with Louisville by railroad, is a delightful town, and we hope to find it, on the occasion of the meeting, the point of convocation of a goodly number of our medical brethren from all parts of the State. In our next number we will publish an abstract of the executive proceedings of the last meeting, and would also gladly make room for an appeal to the profession for a renewal of their interest in this once prosperous but now sadly reduced Society.

LITERARY AND MISCELLANEOUS.

Wind of a Shot.—M. Pelikan, a Russian, has made some curious observations upon the contusions supposed to be produced by the wind of passing balls. Mr. P. applied to the committee on artillery of St. Petersburg, and having obtained some pieces of large calibre, had a machine constructed for measuring the force exerted by the wind of balls passing at various distances. The results obtained were constantly the same. At the distance of three inches, a passing ball produced not the slightest effect. The conclusions deduced by Mr. Pelikan are:

1. A projectile passing very close to any object exercises only an insignificant influence upon it.

2. That what is called the wind of the ball, even with a full charge of powder, has so trifling a force as to be incapable of determining any lesion.—*Annual Scientific Discovery.*

Blasting with Gun-Cotton.—It is generally said that gun-cotton produces three times the effect of gun-powder; but military engineers aver that the effect which the explosion of a certain quantity of gun-cotton will produce, can never be exactly foretold. If the cotton is very strongly compressed when the electric spark is applied to it, the effect which it produces is very great; but if it is at all loose, it is much less efficacious than gunpowder. If a few pounds of powder explode in a room, the devastation must necessarily be great; but if the same weight of gun-cotton is strewn loosely on the floor and then ignited, a sudden "puff" takes place, but the articles in the room are uninjured. The Austrian Government has expended a great deal of time and much money in making experiments; but it is beginning to discover that powder is preferable to cotton.—*Ibid.*

Effects of the Preparations of Lead Upon the Inferior Animals.—A. M. Pecart-Taschereau, a litharge manufacturer (*Deutsche Klinik*), has investigated, with some care, the effects of the preparations of lead upon the inferior animals. Strange as it may seem, he soon noticed that the Dog is never affected with symptoms of lead poisoning. He has seen this animal roll in litharge and white lead, and afterwards lick itself clean; but no evil consequences ever attracted his attention.

The Cat, on the contrary, is soon killed. This animal dies in convulsions, not only in establishments where litharge and white lead are prepared, but even in those places where minute quantities of lead chance to be present, in the compositor's rooms, and where newly printed books have been stored. New ink, it is well known, always contains a certain quantity of this metal.

M. Pecart-Taschereau tried a very decisive experiment. He hung several cages, in each of which a cat was confined, in his factory, and in a short time, one after another, all died.

Mice—and the lead manufactories are infested by them—play in the litharge and white lead without any apparent evil consequences.

M. Rouart, white lead manufacturer in Clichy, remarks that Rats, which multiply most rapidly in his establishment, are very apt to suffer from paralysis of the lower extremities.

The Horse, exposed to the poisonous atmosphere of the lead factories, appears to be liable to a paralysis of the muscles of the larynx. The recurrent laryngeal nerve (which conveys the motory impulses to the muscles of the larynx) appears unable to perform its proper functions, whilst the remainder of the pneumo-gastric nerve is totally unaffected. The veterinary surgeon, Delanay, has performed, in these cases, tracheotomy, with the result of preserving the valuable animal, notwithstanding the local paralysis.

Birds soon succumb to the poison. It has been observed that sheep and goats that feed near lead factories frequently suffer from hæmaturia, and are also liable to miscarry. It is also asserted that in such neighborhoods women are peculiarly apt to have premature labor.—*Med. and Surg. Reporter.*

It is stated by Dr. A. S. Taylor, in his work on "Poisons," a new edition of which has recently been published in London, that lead paralysis may result from articles of food, from snuff, tobacco, etc., sold in what is denominated "tinfoil," which is, in truth, almost pure lead. This statement may cause some surprise; but he furnishes another statement that is yet more remarkable, from which it appears that vegetables are capable of taking up lead from the soil, and incorporating it with other materials in their organisms. Cattle-poisoning by lead, so alleged, became the subject of a chemical investigation, and the question was, whether the cattle were injured by the fumes from the chimney of the lead works, or from the lead in the soil. Earth was brought to London from the field in which the cattle fed. "Mustard and cress seeds were sown in these four samples of the Mendip leaden soil, and, for a comparative experiment, in a sample of ordinary garden mould. In about eight days the crops were carefully cut, without interfering with the earth, and submitted by Mr. Brande and myself to chemical examination. We first satisfied ourselves that there was no lead on the outside of the plants, by washing them in pure diluted acetic acid, and testing the washings. The vegetable matter was then dried and burnt, and lead, in well marked quantity, was found in the ashes. P. 512.—*Ibid.*

The Foe of the Tarantula.—The tarantula has a deadly foe in the wasp, which preys upon it. The manner in which the

wasp attacks the tarantula is described by the editor of the Mariposa (Cal.) Democrat, who recently witnessed its mode of operation.

An ugly looking tarantula was shuffling along, at the usual awkward gait, lifting his long, unwieldy legs above the short blades of grass, when suddenly the venomous insect stopped short in its wanderings and raised itself to its full hight, as though watching the coming of some unwelcome visitor. It then quickly crouched behind a tuft of dry grass, and remaining very quiet, seemed to make himself as small as possible. A slight buzzing was heard in the air, and in a moment the wasp passed quickly near, hovering on the wing over his trembling victim. Like some bird of prey, the wasp remained poised a moment, and then, quick as thought, darted down upon his enemy, and stung him many times with great rapidity. The tarantula, smarting under the pain, began a retreat with all the speed of which he was capable; but the wasp hung over him with revengeful tenacity, and again and again struck him with his venomous sting. Gradually the flight of the tarantula became slower, and more irregular, and at length, under the repeated thrusts of his conquerer, he died, biting the grass with his terrible fangs. The wasp then seized the tarantula and dragged him away.

The American Medical Association will hold its thirteenth annual meeting at New Haven, Ct., on the *first Tuesday of June*, 1860.

The secretaries of local societies, colleges, and hospitals, are requested to forward the names of delegates, as soon as they are appointed, to

STEPHEN G. HUBBARD, M.D., Sec'y.

New Haven, Ct.

National Convention for Revising the Pharmacopœia.—The following appointments of Delegates to the Convention for revising the Pharmacopœia, to meet in Washington on the first Wednesday in May next, having been duly made known to me, are hereby announced, in compliance with a provision of the Convention of 1859.

From the Massachusetts College of Pharmacy—Messrs. Theodore Metcalf and Charles T. Carney.

From the New York Academy of Medicine—B. W. McCready, M.D., E. H. Davis, M.D., and E. R. Squibb, M.D.

From the College of Physicians of Philadelpaia—George B. Wood, M.D., R. P. Thomas, M.D., and Robert Bridges, M.D.

From the University of Pennsylvania—Joseph Carson, M.D., R. E. Rogers, M.D., and Joseph Leidy, M.D.

From the Jefferson Medical College of Philadelphia—Franklin Bache, M.D., and T. D. Mitchell, M.D.

From the Philadelphia College of Pharmacy—Messrs. Wm. Procter, Jr., Edward Parrish, and Alfred B. Taylor.

From the Medical Society of North Carolina—William Geo. Thomas, M.D., Peter E. Hines, M.D., and Edward Warren, M.D.

From the Medical Society of the State of New York—Drs. E. R. Squibb, Howard Townsend, and Caleb Green.

From the College of Pharmacy of the City of New York—Messrs. Wm. Hegeman, Alex. Cushman, and John Heakim.

From the Faculty of Physic of the University of Maryland—Professors Samuel Chew, Charles Frick, and William E. A. Aikin.

From the Maryland College of Pharmacy—Messrs. G. W. Andrews, Israel J. Graheme, and Alpheus P. Sharp.

From the Cincinnati College of Pharmacy—Messrs. E. S. Wayne, W. S. Merrill, and W. J. M. Gordon.

By order of the Convention of 1850.

GEO. B. WOOD, PRESIDENT.

Philadelphia, February 14, 1860.

Other medical journals will please copy.

SEWERAGE AND DRAINAGE OF LARGE CITIES.—At a meeting of the American Medical Association, held at Louisville, Ky., May, 1859, Dr. A. J. Semmes, of New Orleans, was appointed chairman of the committee on the "Influence of Sewerage and Drainage of large cities on Public Health." Any facts, suggestions, documents, reports, or other matter having relation to this important subject, will, he announces, be thankfully received and duly acknowledged by him.

MONTHLY MEDICAL NEWS.

VOL. II. LOUISVILLE, KY., MARCH, 1860. NO. 3.

AN INAUGURAL DISSERTATION ON GOITRE.

Submitted to the President, Board of Trustees and Medical Faculty of the University of Louisville, for the Degree of Doctor of Medicine. By N. W. BROWN, *of Mexico*, 1859–60.

I propose to show from eight years of observation in the goitrous districts of Northern Mexico, that goitre is produced by the use of water impregnated with minerals.

In these goitrous districts which I shall now describe, we meet with iron, copper, lead, sulphur and alum, in their many different forms and combinations existing in nature. In some of these localities the lead and copper may not be present, but the sulphurets and oxides of iron are invariably found, and in abundance.

The rivers Sinaloa and El Fuerte, take their rise in the Sierra Madre some seven or eight thousand feet above the level of the sea, and flow westward to the Pacific. On the tributaries of these streams are situated many mining towns and villages, whose inhabitants are affected with goitre. These towns are situated at different heights: from three hundred to two thousand feet above the sea; and are generally in the deep canons, or narrow glens, surrounded by steep, high mountains. The climate varies.

In Bacobarila (Gold Placer), we find about twenty-five per cent. of the females over twelve years of age affected with goitre; males of same age about five per cent. This town is situated on a creek some four hundred yards from where the creek empties into the river Sinaloa, at an elevation of about five hundred feet above the sea. The town is built on a

conglomerate, volcanic rock. The soil in the neighborhood is not more than six inches in depth, with but sparse vegetation. There is no land cultivated in the vicinity of the town; and being two miles distant from the mountains, it is thereby freely exposed to the sun and winds. The climate is remarkably dry—only rains during three or four months of the year. The inhabitants drink of the water from the creek which, in the dry season, sinks into the gravel and sand, and then it is procured by sinking wells in the bed of the creek. In this gravel are found loose ores of copper, and oxides and sulphurets of iron; and crossing this creek are many small veins of these ores, from which ooze nauseous springs. Thus the creek water is impregnated with these minerals, even quite perceptible to the taste. A few families of the better class have water brought from the river, which they use, thereby avoiding goitre. The people here were well aware of the properties of the creek water, and informed me that its water caused goitre.

Passing farther up in the mountains we find the town of San Jose de Gracia, situated in a deep gorge, or narrow ravine, at an elevation of some eight hundred feet above the sea, with a fine, dry climate, thermometer never below 40° Fahr., and seldom over 100° in the shade. The water here used is from a creek impregnated with most of the afore-mentioned minerals. We here find about forty per cent. of the females affected, and some five per cent. of the adult males. The rich and poor are affected alike. This town is not exposed to the sun more than seven or eight hours in the day.

Farther up in the mountains, at an elevation of one thousand five hundred feet, we find the celebrated silver mining town of Marelos, situated on a good sized creek surrounded by high, steep mountains. This creek cuts its way through the mountains, and from the tall cliffs trickle many springs of nauseous water, leaving incrustations of iron and alum in their paths. The creek, though coming from some distance from the summits of the neighboring mountains, becomes here mixed with these springs and so impregnated with minerals that it causes goitre in a still greater proportion than in the town of San Jose de Gracia.

I could describe many other towns and villages situated on

the tributaries of this river, Sinaloa, but they all present us with the like facts.

The river El Fuerte we find some seventy-five or one hundred miles north, and parallel to the river Sinaloa. On it and its branches are many small towns and villages, whose inhabitants are engaged in silver mining. In all of these places that I visited I found goitre. The water used by these people invariably contained minerals.

On the river Urique, a branch of the river El Fuerte, are several small towns in which I found only about fifteen per cent. of adult females affected, while on the smaller streams in the neighborhood which are fed by springs, we find goitre in a much greater proportion. Thus in the town of Bahnarachie, where the water is highly charged with iron, copper and sulphur, this water, which is used by all, is so highly charged with minerals that it causes colic and purging to those who are unaccustomed to its use.

In Jesus Maria, a little town near Bahnarachie, we find about twenty per cent. of adult females affected. The water here used is from a creek which runs through the town. Near this village, say four hundred yards, is a spring which issues from a hill of lime-stone. This water is used to irrigate a field of sugar cane. In this field I found several poor families residing; they drank of this water, and only one was affected with goitre, a female, and she informed me that she acquired it in Marelos. These families were surrounded by dampness and running water all the year. This water contained lime, but was free from iron and other minerals.

The Indians who pass the summer months cultivating their crops on the level summits of the high mountains, are not affected with goitre, although they descend in the valleys to pass the winter when their mountain homes are covered with snow; but while they are in the valleys the streams are swollen by the melting of the mountain snows, and thus the water is kept pure and comparatively free from minerals. The spring water which contains these minerals is not at this time sufficient to cause any perceptible effect on the bold running creeks; while in the summer months, while raising their crops, they are some seven thousand feet above the level of the sea, and some three thousand feet above the mineral districts, for we

seldom find minerals in this part of the Republic over two or three thousand feet altitude. On the summits of these mountains, where these Indians reside, it rains in summer, and they are exposed to a much more moist climate than those in the valleys, where vegetation is parched up six months during the warm season. Yet these Indians are not affected with goitre.

It has been asserted that, in Switzerland, those only who resided in the deep glens were affected, and as we ascended the mountains goitre disappeared. This is true also in Northern Mexico, for the simple reason that its cause disappears also as the minerals are seldom found over two thousand feet altitude. While in Chili, where the mountains are much higher than in either country, we find the minerals and mineral waters are never met with over an elevation of four thousand five hundred feet;* but in old Peru, or Bolivia, they are found at a greater altitude. Humboldt met with goitre in Bogota at an elevation of six thousand feet.

I shall now describe a town situated in a plain, ten miles distant from the mountains, in an exceedingly dry climate, and freely exposed to the sun and winds, in one of the most healthy locations in the State of Sinaloa, where the lemon and pine apple come to maturity, and which differs from any place in England or Switzerland, save that the water is here thoroughly impregnated with the aforementioned minerals. This is the town of Au Corrona, and we here meet with goitre, the water of this creek coming from the mountains where iron, sulphur and copper are found.

In the sea ports, where the wealthy class use rain water, we never meet with goitre in their families, while in the neighboring towns, where minerals are found, there we find the inhabitants more or less affected.

Dr. Bally says: "Bronchocele to me appears to be produced by certain waters which issue from the hollow of rocks, trickle along the cliffs of mountains, or spring from the bowels of the earth. That this is the case, I may instance some fountains in my own country (Departement du main au Hammeau du Thent,) the use of whose waters will, in eight or ten days, pro-

*See Report on Minerals and Mineral Waters of Chili. By Professor J. Lawrence Smith.

duce or augment goitrous swellings, as those who avoid the use of these waters are free from goitre or cretinism."*

Many such springs as described by Dr. Bally have been pointed out to me, and I invariably found them to contain much mineral.

These two rivers, on emerging from the hills, enter the low, flat country known as the *coast*, and on them are situated many towns and Pueblos, so situated of necessity on account of the scarcity of water, for here there are no springs or creeks during the dry season. These rivers receive their constant supply from the snow and rain in the mountains where there are no minerals, but on their descent they pass through the mining districts, and receive the waters from springs and creeks which are impregnated with minerals, thereby imparting to them their character, be it never so slight. But this water, on reaching the dry, sandy coast, sinks, and percolates through the gravel and sand, thereby filtering, as it were, and ridding its waters of any impurities that before it may have held in solution. In these coast towns we meet frequently with goitre, but on inquiry I found that those affected had contracted it in the mountains or on ranches where the water used was procured from deep wells, which water was impregnated with minerals.

Many young women who remove to the coast recover from the goitre without any treatment. I am acquainted with two young ladies who, by visiting the town of Bacobarita, and who remained there for two or three months during the dry season, returned with goitre; one of them recovered without the use of any remedy, the other had to use the iodine.

The food used here on the coast is the same as that used in the mountains. Malaria and intermittents are raging here six months in the year, while in the mountains it is comparatively healthy. They are the same people, with same customs and habits; yet we find goitre endemial in one, and the other free from it. I do not pretend to say that bronchocele does not exist where there are no minerals, for we see that in many large cities, as in London for example, the disease is frequently met with, such as deformities and swellings of the neck, aris-

*Cyclopedia of Practical Medicine, edited by Drs. Forbes, Tweedie and Conolly, of London, Vol. i: page 326.

ing from common various causes; but what I wish understood is, that I have never met with the endemial disease, known in Switzerland as Goitre, and in England as "Derbyshire Neck," and in Mexico as "Buche," where the inhabitants thus affected did not use water impregnated with *minerals* quite perceptibly even to the taste.

Noticing the great disparity between the goitrous females and males, I am inclined to think that one cause arises (independent of physiology) from the fact that the men do not remain constantly at home, but from the nature of their occupations, are wandering over the country more or less, thereby avoiding the use of the mineral waters to some extent, while the women, who remain at home, are almost continually exposed to them.

I will here add that I met with but few children under twelve years of age who were affected with goitre, and of these the boys were equally as often, if not more frequently, affected than the girls. Those boys affected were generally of a weak, feeble habit.

From these facts, I am satisfied that goitre does not arise from snow-water, rain-water, cold, dampness, miasmatic exhalations, diet, calcareous earth, or intermarriage; but that it is caused by waters which hold in solution combinations of minerals—the oxides and sulphates of iron being here always present.

As to treatment of this disease, I have nothing new to add. My mode was the ordinary iodine treatment externally, and the hydriodate of potash internally, in small doses of about 5 grs. daily, keeping up a slight constitutional effect, which treatment gave general satisfaction. I noticed that those who had hard tumors, or rather enlargements, apparently cartilaginous, with firm adhesions, involving muscles in one adhesive mass, that of these *none* were relieved in the least, though iodine was freely administered. In one case a female used the iodine until (notwithstanding my cautions to the contrary) it caused partial atrophy of the mammary glands, without the slightest relief.

I believe that iodine is a specific for goitre if the treatment be commenced before the gland undergoes certain morbid changes, such as cellular or cartilaginous growths or ossification,

and that its failure often arises from the fact that the so-called goitre is nothing more than encysted tumors, or hernia bronchialis, or other different swellings of the throat, arising from various causes, and not unfrequently improperly styled goitre.

HEY'S AMPUTATION OF THE FOOT:

The Arteries secured by Acupressure. By J. M. CARNOCHAN, *Surgeon-in-Chief to the State Hospital, etc.*

In the year 1853, in a case of wound on the left side of the forehead, in a boy who was affected with the hæmorrhagic diathesis, I resorted to acupressure for the purpose of arresting the hæmorrhage. The boy, an inmate of the State Hospital, and about seven years of age, was born web-handed; the fingers all adhering to each other on their sides, nearly as far as the distal phalanges. Dr. Alexander Hosack, then one of the Visiting Surgeons, divided the adhesions between the fingers of one hand, and this trivial operation was followed by a hæmorrhage which well-nigh proved fatal, from its continuation and uncontrollable character. After four days of unavailing efforts, by the use of pressure and styptics, the bleeding was finally arrested by continued pressure with bandages.

About six months after this, the boy, while playing with his comrades, fell, and received a wound on the left side of the forehead. The cut was irregular, extending about two inches upward and backward, from the superciliary arch, so as to implicate some of the anterior branches of the temporal artery, besides detaching the scalp considerably from the cranium.

He was carried to one of the surgical wards, and the bleeding, which was profuse, was for the time arrested by pressure, effected by compresses and firm bandaging. The bleeding did not appear to come from the orifices of particular vessels, but flowed *en nappe*, oozing generally from the surface of the wound.

The following morning, the blood began to ooze freely through the bandages, and continued for some hours, although moderated by the addition of increased pressure by bandaging. Upon visiting the hospital, I found the patient weak and pale, with some blood trickling over the face, at intervals.

It was apparent that the hæmorrhage was not arrested, and the bandages were removed. The wound was filled with dark, soft, semi-fluid coagulum, upon the removal of which, the surface of the wound was exposed, still affording as much blood as when the accident occurred.

Some compressed sponge was now crowded into the wound, upon which was placed a piece of sheet lead, a compress then laid upon this, and Barton's bandage applied firmly around the head.

In a few hours the blood again showed itself leaking through the bandages. On my visit to the hospital the following day, I found that the patient had lost a considerable quantity of blood during my absence, and that the hæmorrhage was still continuing so freely as to require the removal of the compressing bandages. The same condition of the wound existed as on the previous inspection, and the blood flowed in as much profusion as at first.

The wound having been cleared with a sponge, five strong Carlsbad pins, about three inches in length, were inserted along the wound, (after the manner of the pins in hare-lip), each pin being inserted through the scalp opposite to the point of its detachment from the bone, and carried across the cut, to pass through the scalp at a corresponding point, on the other side of the wound. Around these several pins, the figure of 8 was made with a strong ligature. Another ligature was then passed along the wound under the pins, and crossing in the interval between each pair.

It was hoped that this equable and firm pressure would arrest the bleeding, but it failed equally with the other measures. In a few hours the wound commenced to bulge outward, from the accumulation of blood behind the suture-pins; before long, the blood oozed through the lips of the cut, and trickling over the face, the hæmorrhage again became re-established.

By this time the little patient had become almost exsanguinated, and could no longer articulate. The house surgeons became alarmed, and sat during the night by the bedside, maintaining by turns, manual compression upon the wound, by means of sheets of compressed sponge.

A message induced me to visit the hospital at an early hour,

and I found that as soon as the compression was removed the bleeding still continued unabated. From the first, I had abandoned the idea of cutting down upon the trunks of the temporal arteries, supposing that the incisions made to lay bare the vessels would bleed in a similar manner to the accidental wound. It occurred to me, in this emergency, that a suture-needle or pin might be passed under the trunk of the temporal artery, and that compression used in this way might be successful in arresting the hæmorrhage.

To accomplish this, I selected two long suture-needles, slightly curved towards the point. Feeling with the forefinger of the left hand for the artery, where it passes over the zygoma in front of the ear, I dipped the point of the needle through the skin and other tissues, about three lines to the right of the course of the vessel, and carried on the needle below the artery, directing the point so as to emerge through the integuments, at a corresponding point on the left side of the vessel. This done, I made a figure 8 around the needle, in order to increase the compression already effected on the vessel by the position of the needle. The same procedure was carried out on the opposite side, in order to intercept the anastomosing circulation.

The wound was now cleansed, and filled with dry lint; compresses were laid over the lint, and the dressing completed by the application of Barton's bandage.

Entire success followed the compression of the artery thus effected by the needles. The patient rallied under the use of cordials and tonics; the needles were removed from the arteries on the fourth day; the wound granulated and healed kindly; and in four weeks he was discharged as well.

I have recently read, with much interest, the article of Professor Simpson, of Edinburg, upon acupressure as a means of arresting surgical hæmorrhage. On Saturday last, I had an opportunity of applying this method to the arteries of a bleeding stump, after amputation, and, I am gratified to add, with a very satisfactory result. The case was one requiring amputation of the right foot, at the tarso-metatarsal line of articulation. The operation was performed by making a semi-lunar flap on the dorsal aspect of the foot, a little in front of the tarsus. The flap was then dissected backward, and the dorsal

and plantar articular ligaments, between the tarsal bones and the metatarsus, severed completely. The foot being held horizontally, the narrow knife was slipped under the tuberosities of the first and fifth metatarsal bones, and carried forward, grazing the lower surface of the metatarsal bones, so as to make a flap of sufficient extent to cover the exposed stump. The anterior tibial, external plantar, and internal plantar arteries bled freely, and the three smaller vessels, also, afforded blood enough to require their obstruction. Regarding this as a favorable opportunity to test the effect of acupressure in amputation, to arrest the bleeding from the anterior tibial, I took a steel shawl-pin, with a metallic head, and about four inches long, and passed the point slantingly to the depth of half an inch into the tissues, at about an inch and a half from the course of the artery on the side nearest. The point having passed onward, was made to emerge about a line from the artery. The pin was next directed over the trunk of the vessel, about a quarter of an inch from the bleeding orifice, and again dipped into the tissues on the other side of the vessel, about a line distant from it. The pin was then still pushed through the tissues for about an inch and a half, and again made to emerge onward for an inch. The compression on the artery was complete, and it ceased to bleed. The external plantar artery was next treated in the same manner, and with a similar result, as well as the internal plantar and the other vessels which would have required the ligature. In these last-mentioned arteries, not having at hand acupressure needles of suitable length, I resorted to suture pins; tying a piece of thread to the head of each, in order that they could be pulled away at the proper time. In securing the anterior tibial artery, I did not think it necessary to pass the pin through the integuments, as Professor Simpson recommends. The flaps were now brought together by points of suture, and the long pin and the threads attached to the shorter ones left between the lips of the line of union.

The pins were removed on the seventh day. Since the operation, the patient has been most comfortable, and without the slightest evidence of secondary hæmorrhage.

Judging from the results obtained in the cases just related, I have no doubt that acupressure will become a distinct and

established method for arresting hæmorrhage in operations; and that, although it may not supersede the use of the ligature, it will, in many instances, supplant its use, as being more simple and equally effective, and as less likely to interrupt the primary union of wounds.

The celebrated Edinburgh Professor merits the thanks of the profession for formulizing "acupressure" into a distinct method.—*The American Medical Gazette.*

45 Lafayette Place, *February* 23*d*, 1860.

SELECTED PAPERS.

EXTRACTION OF A BAR OF LEAD FROM THE STOMACH.

By JOHN BELL, M D., WAPEELO, IOWA.

On Christmas day, 1854, I was summoned to see S. W. Bates, æt. 32, who, it was said, while performing the feat of running a bar of lead down his throat, had accidentally let it slip, so that it descended into his stomach; but before I left my office, he came in followed by a crowd. I asked him if he had swallowed a bar of lead. He said he had; and that it was nothing wonderful for him to do so, as he had swallowed a number at previous times. This was said in a half waggish manner, and being to all appearances partially intoxicated, and having withal the reputation of being an expert at juggling and sleight of hand, I supposed it to be one of his tricks, and this opinion was strengthened from the fact that he seemed to be *suffering no inconvenience.* I believed it to be a hoax; but to satisfy myself further, I passed a sound down the œsophagus into the stomach, *but could discover nothing.* I sent him away, but in a few minutes afterward he returned, in company with Dr. Cleaves, of this place. After a brief consultation, we again sounded the stomach, but with no better evidences of a bar of lead than before. We told him to go about his business, and if it troubled him to let us know. The next day he went to work, and continued at work four days, when he went home, some six miles from this place, and becoming unwell, sent for Dr. Robertson, of Columbus city.

On Monday, January 1st, Dr. Robertson requested the physicians of this city to meet him forthwith in consultation at the residence of the patient Dr. Taylor and myself answered

the summons promptly. Drs. Robertson, Neal, Cleaves, Graham, and Crawford had arrived before us.

The patient was closely examined, and there was found no perceptible external evidence of any foreign body in the stomach; he was comfortable, up and about, and seemed as well as any of us, if we except some paleness, which might have been produced by the regimen enjoined. Instructions were given to keep the patient on low diet, and open the bowels by a saline laxative; and should any untoward circumstances or symptoms supervene, to notify us at once.

Tuesday, January 2d, 4 P. M., summoned to see Bates immediately. Dr. Robertson soon arrived. Found the patient suffering with considerable gastralgia and abdominal soreness; there had been considerable retching and vomiting of a dark, watery fluid; pulse small and tense; great anxiety, restlessness, prostration, and apparent sinking of the vital powers. The bowels had not been moved. He was very sensitive to pressure over the left iliac and inguinal regions. *We were now satisfied that he had swallowed a bar of lead.* We prescribed sulphate of morphia, to keep him quiet through the night, and fomentations to the bowels, and left him.

Operation.—Wednesday, January 3d. Present, Drs. Robertson, Cleaves, Graham, and myself. The patient seemed much as on the previous evening. He had great prostration and faintness on attempting to rise. The patient having been properly placed and secured, chloroform was administered. It produced, at first, some nausea, and he threw up a quantiy of black, fetid, watery fluid. As soon as insensibility ensued, I made an incision from the point of the second false rib to the umbilicus, dividing the skin and cellular membrane; thence through the abdominal muscles to the peritoneum, which I laid bare the whole length of the incision. I then made a minute opening at the lower end of the section, through the peritoneum, passed in the director, and with a probe-pointed bistoury divided it through the entire length of the incision. The division of the peritoneum produced a spasmodic contraction of the muscles of the abdomen, and a large quantity of the omentum and bowels were ejected from the orifice. Increasing the chloroform controlled the spasm, and I replaced the bowels as speedily as possible, and passed my hand inward

and upward through the incision, grasped the stomach, and immediately *discovered the bar of lead* and its position. It lay in a direction from right to left, the upper end resting against the walls of the stomach to the right of the cardiac orifice; the lower end in the greater curvature of the stomach, to the left of and below the pylorus. As it was impracticable to reach the upper end, I seized the bar between my thumb and middle finger, and with the forefinger on the lower end of it, I retracted it upward and backward, for the purpose of making the incision in the stomach as high up as possible. I then passed a scalpel in, along the side of the forefinger as a director, and divided the coats of the stomach immediately at the end of the bar, making the incision parallel with the muscular fibres, and not larger than to admit of the removal of the lead. I then introduced a pair of long forceps, seized and drew out the lead, and placed the stomach in its natural position. The external orifice was closed with the ordinary interrupted suture and adhesive straps, a compress applied, and a roller around the body.

The time occupied in operating was twenty minutes. Considerable delay was occasioned by the protrusion of the contents of the abdomen, which had to be replaced before the operation could proceed. As soon as the effects of the chloroform passed off, a quarter of a grain of sulphate of morphia was administered, and the patient left in charge of a judicious medical attendant.

The following are the notes of the subsequent treatment of the case:

During the afternoon after the operation, the patient was very restless; morphia continued, which procured intervals of sleep. Pulse 83, soft and compressible. At 9, P. M., great restlessness; nausea and sinking of the pulse; constant melanotic regurgitation. Prescribed sulph. morphia, gr. $\frac{1}{2}$. Pulse rose—became full and tense. At this time the salts taken on Monday and Tuesday commenced operating; he had seven operations. Pulse softened, and he dropped into a quiet and refreshing slumber. The patient was kept lying on his back. 12, P. M., had a violent attack of vomiting, and threw up about three pints of a dark greenish fluid, mixed with grumous blood; complains of pain in the stomach and bowels; gave

him sulph. morph., gr. ½; became quiet, and slept at intervals until daylight; iced elm water as drink.

Thursday, 4th, 10, A.M.—Patient quiet; pulse 85, and moderately full; some thirst and fever; complains of pain in the stomach and bowels; says he feels a sensation as though water was dropping on his stomach. Morphine continued at regular intervals; iced toast water, and iced mucilage, for drink. 3, P.M.—Pulse 85, rather hard. Bled him ten ounces. Continued morphia. 6, P.M.—Complains of nausea, and has frequent alvine discharges; pulse 86, hard; considerable thirst; gave pill of opium. Ordered ipecac and morphia; left powders of opium and acetate of lead, to control the bowels.

Friday, 5th.—Nurse reports a good night's rest; says the pulse ranged through the night from 70 to 75; no operation from 8 o'clock till 4 this morning; stools watery; complains of nausea; pulse 83, soft; tongue white and dry; considerable thirst; slight cough. 5, P.M.—Found the patient complaining of gastralgia, nausea and thirst; frequent alvine dejections; pulse 75, hard and full. 9, P.M.—Vomited; gave morphia and ipecac; patient became quiet. Continued iced mucilage.

Saturday, 6th, 4, P.M.—Patient quiet and easy; pulse 80, soft; tongue clean; an itching sensation in the wound; slight tumefaction, and some soreness, of the abdomen; no movement of the bowels since Friday at 4, A.M. Ordered enema.

Sunday, 7th, 11, A.M.—Patient comfortable; had two dejections. Raised the bandage, and made a small opening through the adhesive straps for the discharge of pus. Pulse 80; has great desire for nourishment. Directed the bowels to be kept open by enemata. 5, P.M.—Is troubled with severe melanotic regurgitation; complains of burning sensation in superior epigastric region; pulse 65, soft; ordered an enema, and solution of bitartrate of potash for drink. Morphia, gr. ¼, occasionally.

Monday, 8th, 10, A.M.—Patient quiet; pulse 75, full; face flushed; bowels moved once last night. Examined the wound, and found it had cicatrized nearly its entire length; washed and dressed it. Bled the patient ten ounces. Enema and morphia after the bowels move, during the night, should he be restless.

Tuesday, 9th, 6, P.M.—Patient bolstered up in bed, and com-

fortable. Pulse 76; bowels not moved since 8 last night. Ordered an enema. Examined the wound, and found it doing well. Bitart. potass. continued.

Wednesday, 10th.—Found the patient quiet; pulse 70; rested well through the night; has an intense craving for food; face slightly flushed. Advised some nourishment to be taken. He complained of cramp in the extremities on attempting to move.

Thursday, 11th.—Patient tolerably comfortable; some thirst; has eaten too much, and has exercised more than was prudent. Pulse 75, and hard; face flushed; dressed the wound, which is healing rapidly; bowels open. Ordered sulph. morph., gr. $\frac{1}{4}$, and ipecac, gr. i.; abstemious diet.

Friday, 12th.—Patient comfortable; says he feels well enough, except some pain in the lower bowels; pulse 78, soft; tongue natural; some tenderness on pressure over the hypogastric region.

Sunday, 14th.—Found the patient standing in the door; dressed the wound, which looks healthy; tongue slightly coated; bowels inactive; appetite good. Ordered mass. hyd., gr. x., followed by enema.

Wednesday, Jan. 17th.—Found the patient resting quietly after a walk of half a mile. Washed the wound, clipped and removed the sutures, and dressed with basilicon cerate, with injunction for bowels to be kept open, and care in diet. Patient dismissed.

Remarks.—It will be observed in this remarkable case, that convalescence was established as rapidly as after most of the minor surgical operations. The patient was discharged on the fifteenth day after the operation, and has continued well up to this time. He is now residing in this city, working daily at his trade—that of a shoemaker. The orifice in the stomach was made on the left anterior side, and I think about parallel with the pylorus. The opening was just large enough to withdraw the lead. From some cause, probably from the efforts to vomit, a portion of the omentum had been forced out between the sutures, and when the adhesive strips were removed for the first time it was found protruding from one half to three quarters of an inch. Upon examination with a probe, I found it had formed adhesions on both sides of the orifice. I there-

fore removed the external portion with a pair of scissors.

After carefully examining the brief suggestions given by authors on this kind of operation, it seemed to me that there were none that would suit this case. Nothing less than perfect control of the stomach could promise success, if success were attainable.

First, the operation must be conducted so as to preserve the stomach from those serious injuries arising from the advised manipulation previous to opening it.

Second, the incision must be made sufficiently high up in the stomach to prevent the escape of its contents (or should the opening be made into the stomach where the bar rested, the incision *must be stitched*).

Third, to make an incision into the cavity of the abdomen, and attempt to manipulate the stomach and bar of lead with instruments, had in it, to my mind, no promise of success, when we recollect that the length of the bar was $10\frac{3}{4}$ inches, and that the stomach must be opened so as to withdraw the bar of lead *by its lower end.* I therefore adopted what I conceived to be the correct theory, viz: 1st, to open the abdomen large enough to pass in my hand, and thereby have the stomach and its contents under perfectly easy and natural control; and, 2d, to make the abdominal incision in such shape as to command the point of the bar of lead *after it had been retracted*, without bruising, distorting or even seriously misplacing the stomach.

It may be a matter of surprise that an operation was not done sooner. Our reply to the question is, that an operation of that magnitude was not justifiable as long as there was any doubt as to the lead being in the stomach; that the evening previous to the operation was the earliest time that all doubts of the fact had vanished; and the operation was proposed at the earliest practicable moment thereafter. Although I had seen the patient, in company with other physicians, almost daily after the singular feat had been performed, during all this time I had not seen one single symptom that was *conclusive evidence* of the presence of a bar of lead in the stomach.

The length of the bar is $10\frac{3}{4}$ inches, and its weight $9\frac{1}{2}$ ounces avordupois.

I would here remark that Mr. Bates has been residing in

Kansas Territory during the past summer.—*Communicated for the Boston Medical and Surgical Journal.*

We quote the following article from the Boston Medical and Surgical Journal, for the double purpose of giving to our readers the developments made by Dr. Storer's investigations, and to express our sincere gratification at the fact that the Oriental custom of child-murder has not, to any considerable extent at least, found its way into our great valley. Twenty-one years of observation have brought under our notice but few cases of criminal abortion; and in conversations with our leading and oldest practitioners, we find their experience in this regard singularly corresponds with our own.

We have observed, however, within the last few years, an increasing repugnance on the part of the women of our country, in every grade of society, to incur the pains and dangers of child-birth, and the cares, anxieties and annoyances of maternity, proven by their frequent applications to the physician for instructions to enable them to prevent or avoid conception. The husbands, in a large number of instances, are found in full sympathy with their wives, in their anxiety to escape the troubles of raising children.

This anxiety to escape conception will doubtless by and by ripen into attempts at criminal abortion, unless something can be done to turn aside the current of prejudice to child-raising, and the great heinousness of the sin of child-murder can be properly impressed upon the popular mind.

Criminal Abortion.—It is a somewhat startling, and to the moralist must be a disheartening fact, revealed by the statistician, as well as by the experience and observation of the medical practitioner, that a crime, in itself one of the foulest, and against which in times past the severest penalties have been attached, should, at this moment, be one of the most frequent, not only in the older portions of the civilized world, but here, in our very midst, where it has been supposed, from the character of the population and of the institutions under which we live, a higher and more healthy moral tone must necessarily prevail. We refer to the felonious act by which a blow is aimed at the life of a human being, while yet in its fœtal stage of existence, either for the purpose of concealing dishonor, or for the monstrous and more unnatural one of escaping the cares and responsibilities of maternity—an act which, three

hundred years ago, subjected those convicted of its committal, to all the penalties, civil and ecclesiastical, inflicted on murderers.

Our attention has been called to the subject at this time by a treatise on criminal abortion, from the pen of one of our most painstaking and careful investigators, Dr. H. R. Storer, who, it will be remembered, was appointed at the session of the American Medical Association, in May, 1857, chairman of a committee to investigate the whole subject and report thereupon, with a view to the suppression, if possible, of this growing evil. This paper contains much interesting information, and if it do as much for poor humanity as might be fairly expected, from the ability and good intentions of the author, he will have much reason for pleasant reflection.

It is not our object, nor is this the place, to enter into any extended analysis of this painfully interesting statement, but we have been so struck with some of the results therein arrived at, particularly as showing the alarming prevalence of the evil in question, and its bearing upon the census returns, that we have thought a brief allusion to the subject might not be inappropriate, as simply calling attention to what, as has been well said, "appeals, in its medical as well as moral bearings, alike to our patriotism and humanity."

The effect of this species of child-murder, when practiced to any considerable extent, upon the population, in diminishing its annual ratio of increase, is at once obvious; but we confess we were not prepared for the results given by Dr. Storer. Here we have statistical tables taken from the most trustworthy sources, not only in Europe, but in many parts of our own country; and, from the latter, it would appear that the native population in our own State of Massachusetts, where, it may be fairly assumed, every possible natural advantage exists for its rapid increase, is stationary, or actually diminishing; the general increase being due to the excess of births over deaths among those of foreign origin. Allowing for the influence of western emigration in producing such a result, this can hardly be made to account for what is plainly evident from the statistical returns. It appears, from tables carefully compiled from the fifteen published Registration Reports of the State of Massachusetts, that the ratio of births to the population in this State, both foreign and American combined, was in 1850, 1 in 36; and in 1855, 1 in 34; a ratio much smaller, says our author, than that obtaining in most countries in Europe—where from the greater difficulties of living, and the other conditions arising from a crowded population, we should naturally expect this ratio to be at least comparatively small. Such, however, does not seem to be the case, although we find that in nearly all

European countries it is rapidly diminishing. Thus, during the last century it lessened in Sweden by a fifth; in Prussia, by a fourth; in Denmark and England, by a third; and in France, by one half. So, in the city of Paris alone, from 1817 to 1831, the births averaged about one in 26-87 inhabitants; while from 1846 to 1851, the average was 1 in 32.

If we now refer to the statistical tables as showing the ratio of still birth, including abortions, to living births, we find this to be steadily increasing, and that it is probably greater in the State of Massachusetts, at this moment, than in Europe. For in 1855 we find it about 1 to 15-5; being, at the same time, in France, 1 in 24, and in Austria, 1 in 49.

Again, if we take the ratio of fœtal deaths to the general mortality, we find this higher in New York and Massachusetts than in the countries of the old world, and still on the increase; having risen in the city of New York from 1 in 37, in 1805, to 1 in 13, in 1855; and in Massachusetts from 1 to 13·3, in 1851, to 1 in 10·4, in 1855—the last being greater than the ratio in New York in 1856.

The comparison of the number of abortions and premature births, with still births at full time, seems to establish still further the truth of the deductions already made. Thus, in New York, in 1838, the ratio was about 1 in 10; this having become as high, in 1856, as 1 in 4; while in Massachusetts, from 1850 to 1855, we blush to say it, the proportion was even eight times greater, that is, about 1 to 5. Allowing for errors, and for the less efficient registration elsewhere, we are still forced to the conclusion, by a comparison of the ratio of births to the population in Massachusetts with that of the other countries alluded to; of still births, including abortions, to living births; of fœtal deaths to the general mortality, and of abortions and premature births, to still births at full time, that criminal abortion prevails to a greater extent in this State than in those countries. "Few persons," says Dr. Storer, "could have believed possible the existence of such frightful statistics, the result towards which they tend, or the dread cause from which they spring."

With regard to the proposed remedies for this evil, we confess we have little confidence in mere legislative enactments. Much, it is true, may possibly be done towards its partial suppression, by stringent laws, promptly and efficiently enforced; but when it is considered that this crime is fast becoming, if it has not already become, "an established custom," not confined to the unfortunate, but resorted to by the married of all ranks and classes of society, for the purpose of ridding themselves of what they have learned to regard as a burden too heavy to be borne, we fear little can be accomplished by legislation. It is

rather to the medical profession, and to those more immediately entrusted with the morals of the community, that we are chiefly to look for the true remedy. The physician may do much by warning his patients against the dangers and guilt of this awful crime, and using the "greater vigilance lest he become its innocent and unintentional abettor;" and the moralist may do more by the inculcation of those principles in the young, that shall lead them to regard with abhorrence such a violation of the positive laws of God, involving, as it does, the guilt of murder, and a total indifference to the most sacred privileges with which woman is endowed.

HOMEOPATHY NOT RECOGNIZED IN EUROPE.

The following correspondence, which sufficiently explains itself, has been furnished us by Dr. E. F. Smith, the efficient Health officer of this city:

Messrs. Editors: It will be remembered by the readers of your journal, that in May, 1858, the Homeopaths of this city petitioned the City Council of St. Louis to permit a portion of the City Hospital to be set apart for the alleged purpose of testing the so-called merit of Homeopathy; the real incentive, as we know, of their petition being, that its allowance might magnify the humbug into some professional consequence. Among the arguments they used in support of their petition, was the assertion that Homeopathy was sanctioned by the crowned heads and nobility of Europe, and that European governments recognized it by permitting its teaching and practice in their hospitals. The falsity of this assertion was known to every one conversant with the state of medical matters in Europe; but that it might receive its emphatic contradiction from an official source, I addressed myself to the American Ministers resident at Vienna and Berlin, and to the Minister of Public Instruction of France, asking from the proper department of these governments a reply to the following questions:

1st. Is the teaching of Homeopathy authorized or permitted in any of the Colleges or Institutions of your Government?

2nd. Is the practice of Homeopathy permitted in any of the public Hospitals of your Government?

3rd. Is the private practice of Homeopathy sanctioned in your Government?

In reply, I received the following letters, which, as they will prove of interest to the profession, I give you for publication:

LEGATION OF THE UNITED STATES, VIENNA,
July 19, 1858.

Sir: In the absence of Mr. H. R. Jackson, Minister Resident of the United States at Vienna, I have the honor, in compliance with the request contained in your letter of May 14th, to transmit the following translation of a communication just received from the Austrian Minister of Foreign Affairs:

VIENNA, July 10, 1858.

In his estimated note of the 21st ult., the Minister Resident of the United States, Mr. Jackson, requested the mediation of the Ministry of Foreign Affairs to obtain a declaration from competent authority on these points:

1st. Is the teaching of Homeopathy authorized or permitted in any of the colleges or institutions of Austria?

2nd. Is the practice of homeopathy permitted in any of the public hospitals of Austria?

3rd. Is the private practice of homeopathy sanctioned in Austria?

The Imperial Ministry of the Interior, which was applied to, as it has charge of all medical and sanitary affairs in the empire, has returned answer—to 1st, that in Austria, homeopathy is taught not by publicly appointed professors, but only by private teachers—to 2nd, that this mode of cure is practiced, not in public hospitals, but only in cloister, criminal, and private hospitals—to 3rd, that the private practice of homeopathy is permitted to every physician who has a diploma.

In the hope that the above will answer the wishes of the Hon. Minister Resident, the undersigned renews to him the assurance of his perfect consideration.

[*Signed,*] COUNT BUOL,
Minister of Foreign Affairs.

As these declarations come from the highest official source, I presume they will satisfy the object of your inquiries.

Very respectfully, your obedient servant,
G. W. LIPPETT,
Sec'y of Legation.

To E. F. SMITH, M.D., St. Louis.

Sir: In reply to your letter of the 5th inst., in which your Excellency asks information upon the instruction and practice of homeopathy, I have the honor to inform your Excellency that homeopathy in Prussia is not admitted into the universities nor hospitals, nor other public institutions. Physicians are allowed, if they please, to exercise homeopathy in private practice.

Returning to your Excellency the letter of Dr. E. F. Smith,

of St. Louis, I beg you to accept the opinions of my very high consideration.

BERLIN, April 15, 1858.

[*Signed,*] RAUMER.

His Excellency, Mr. J. A. WRIGHT, Envoy Extraordinary and Minister Plenipotentiary of the United States.

PARIS, April 22, 1858.

Sir: I take cognizance of the letter which you have written me, demanding of me information upon the subject of the teaching of Homeopathy in the Faculty of Medicine of the Empire.

The exercise of homeopathy is not legally authorized in France. My administration has not authorized me to exercise any measure having reference to the teaching of homeopathy.

Receive, Sir, the assurance, etc.,

The Minister of Public Instruction,

Dr. E. F. SMITH, St. Louis, Mo. ROULAND.

These letters speak for themselves: coming as they do from the highest official sources of Austria, Prussia, and France, they palpably show that this humbug not only meets with no favor from the scientific departments of those governments, but is completely discountenanced by them.

Respectfully, E. F. SMITH.

Mr. S. T. TROWBRIDGE, of Decatur Ill., has invented a physician's cane. It consists of a hollow tube, closed at its bottom, and having a semi-tube attached to the knob or handle, and fitted within the cane, and allowed to move freely in and out of it, and forming a receptacle for vials containing medicines. The invention is designed to supersede, to some degree, at least, the use of the saddle bags.—*Philadelphia Medical and Surgical Journal.*

VRIES' LAST VICTIM.—The cause of the arrest and imprisonment of Vries, the "Docteur Noir," under the charge of homicide, is sufficient to condemn his motives. A Spanish lady had arrived in Paris expressly to place herself under his care. The disease was cancer. Vries, of course, promised that he would effectually eradicate the disease in consideration of an immediate payment, of 10,000 francs. The 10,000 francs were laid down, and patient grew worse and worse. Suddenly, Vries, whose visits had at first been most punctually made, ceased to attend. A few days after, the lady died. Amongst her papers was found a letter from the quack, evidently in answer to her complaints. He says that he knows perfectly

well that she is dying, and asks what else she can expect for 10,000 francs. If she will send him 40,000 more, he will cure her still; if not, however sorry he may be, he must let her die. This letter having been placed in the hands of the police, his arrest followed. Seeing that he promised impossibilities, we do not perceive how he can be found guilty of homicide for not fulfilling them. There was abundant fraud, but hardly homicide.—*London Lancet.*

The Salts of Cerium in Vomiting of Pregnancy.—Dr. Thompson, of Edinburgh, adds his testimony to that of Dr. Simpson, in favor of Oxalate of Cerium, for the relief of the sympathetic vomiting in pregnancy. He says it is the most efficacious remedy he has ever employed; and that it is not only so in the form of vomiting dependent on the sympathetic derangements of the stomach, consequent upon functional or pathological changes in the uterus, but also when it proceeds from morbid states of the stomach itself.

The dose is from one to two grains, at intervals of six to eight hours, either in the form of powder or pill.

Traumatic Tetanus.—B. D. Carpenter, M.D., of Suffolk County, New York, reports in the *New York Journal of Medicine*, sixteen cases of this disease which have fallen under his observation. It has been his unparalleled good fortune to see fifteen of them recover. The treatment mostly relied upon was Dovers' Powder, five to eight grains every three or four hours, and application of ice to the head and spine. He attributes the recoveries to the ice mainly. Its employment was suggested to him by having noticed recoveries in horses from lockjaw by exposure to cold rains.

Hydrophobia.—Dr. Ligget, of Maryland, reports in the *Am. Jour. Med. Sciences*, a case of Hydrophobia successfully treated with dram doses of calomel. The subject was a negress aged twenty, who, upon being closely pressed by her master, confessed that a dog which had died with all the symptoms of *rabies canina*, had seized her by the great toe, and had thrust one of his tusks between the nail and the flesh, so as to draw blood; after the bite, how long the Doctor does not tell us, but

on the 16th July, 1851, she presented the characteristic symptoms of hydrophobia: Dr. Swope in consultation, and concurring in diagnosis. Whereupon Dr. L., under the preconceived theory of the disease, the main idea of which is, that the salivary glands are the emunctories through which the rabid poison is to be eliminated, ordered her to take a dram of calomel every four hours. From the 16th to the 24th she took a marvellous quantity of the medicine, and in despite of its production of livid ulcers in the mouth, she made a full recovery.

It is so seldom we see or hear of recoveries in this disease, we have thought it worth while to be thus particular in noticing this case. But we would submit to Dr. L., and our readers, whether it is not a little strange, if calomel is a cure for hydrophobia, that we did not have some reports of cases cured during the prevalence of the calomel mania a few years ago, when the practice was in almost every attack of disease, to give two scruples of the submuriate, and increase the dose by geometrical progression, every six or eight hours, until the case was ended.

The Seat of the Vesicating Principle of *lytta vittata.*—Joseph Leidy, M.D., has satisfied himself by a series of well devised experiments, that the vesicating principle of this fly belongs to the blood, the peculiar fatty substance of certain accessory glands of the generative apparatus, and to the eggs.

The active principle of cantharides, was thought by Peireira and others, to reside in the generative organs of the animals.

Sacharated Lime.—This article has been claiming notice, of late, and is urged by Dr. Jno. Cleland, of Edinburgh, as the most powerful and pleasant antacid we have. He also asserts that it does not weaken digestion like the alkalies, but on the contrary, is an important tonic in dyspepsia. Whilst it corrects diarrhœa dependent upon disordered digestion, it overcomes the chronic constipation due to dyspepsia. The following is his formula for its preparation:

Slake eight ounces of quick lime; rub up with it five ounces of white sugar; add one pint of water; stir for some time,

till the hard, stiff masses, which the sugar and lime are liable to run into, are as much as possible dissolved; then filter. The product should be perfectly clear, and of only a slightly yellowish tint. It should be kept in bottles, well stoppered. Dose, 20 to 60 minims, in water, after meals.

ABSTRACTS FROM FOREIGN JOURNALS.

Messrs. Editors: I propose to glance at the items of medical news, as they may be noted in foreign journals, and give you from time to time a brief synopsis of such as may seem to possess sufficient interest to be worthy of a place in your journal. But with all deference to the better judgment of that large class of Americans who love so well to feed upon, and cannot readily digest any other than foreign food, I contend that those journals are inferior to our own in point of general interest.

I would not be understood as designing to impute want of ability to the conductors or correspondents of those journals; far from it. I only assert that in point of general interest, the great mass of foreign journals are, in my humble opinion, less instructive to the reader than are our own, nothing more. But, perhaps, in this connection, and in order to enlighten a certain class of croakers who take pleasure in decrying American medicine, and are constantly pointing to the European method of imparting instruction as worthy of emulation, it may be interesting to copy from the British Medical Journal, of February, the following choice specimen of English literature:

Medical Etiquette—*Letter from W. W. Thomas, Esq.*—Sir: The following is a literal copy of a letter written by a surgeon residing in this town. It was forwarded by him to the Llanfyllin Board of Guardians, with the evident intention of injuring me. Unfortunately, prior to my being called in, the patient alluded to in his letter had been attended by another medical man, (at Congleton, Cheshire, I think,) or I should otherwise have taken legal proceedings against him. If it will not occupy too much space, I would feel obliged by your giving it publicity.

I am, etc., W. W. THOMAS,
Deputy Surgeon to the Llanfair District.

Llanfair, Montgomeryshire, Feb. 6, 1860.

To the Magistrates and Guardians, Llanfyllin Union: This is to certify That I've attended Ann Jones, of Bryn Bitfold since 28 decr last. I found her hand and fingers in a state of mortification. The former treatment. Treatment was the cause of the mortification and loss of 3 of her fingers. The sufferings of The poor Girl was beyond discription from the neglect of placing The Hand on a splint and her life was allmost dispaird of when I first saw her, and The stentch was awfull with the most prompt attention I've been able to reserve the sufferer from premature grave. And If The Parents had not complied with my request to give her Wine, she would have died Then, but under Gods blessing I allayd the pain and stayd the mortification, but not till 3 of her fingers were previous to my visit were hopless of restoration, from a Treatment That I deem not worthy of our Profession. I am glad to state now This Ann Jones is recovering, but she will require more extra support for 3 weeks or a month. The mortification destroyd the tendon of The forefinger which had no injury on it and noon of her hand or fingers ought to be allowd to mortify had The been placed on a splint with a proper treatment for The hand.

P.S. I am sure That If I had her hand at first, she would have had her hand and fingers all restored and able to get her livelihood. Three of her fingers I have been oblige To remove last week. Yours &c

I ROWLAND, *Surgeon &c.*

Llanfair Cerinion 30th January 1860.

And again in an editorial of the same journal we find the following caustic remarks:

For many months there has been a very uneasy feeling in the profession that this council, which sits upon the shoulders of the general practitioner with a grip as firm and abhorred as ever the Old Man of the Sea took upon the shoulders of Sinbad, are degrading the value of their diploma by granting it to persons of imperfect and insufficient medical education. This feeling has been strengthened by the granting of the diploma to Messrs. Horton and Meredith; and in various instances which have lately come to the knowledge of the profession, persons have been passed by the college who were not only notoriously incompetent to practice, but were also obnoxious to the medical men of their neighborhood in consequence of their leaning toward quackery. Again, on the strength of foreign degrees obtained without personal examination, gentlemen have been surprised to find themselves all at once made respectable practitioners by the aid of the college council.

Perhaps, therefore, in view of this precious state of affairs, it would be well to divert our attention and change the adula-

tory into a condemnatory tone, or better still, and in polite language, mind our own business. The streams are pure in comparison with the purity of the fountain whence they flow. Purify the source, and emanations from it will only become sullied in their windings through a muddy world. The low estimate which community is placing upon our holy profession is a necessary sequence of that same low estimate which the members of that profession place upon each other. Professors may lecture upon etiquette, and gentlemanly bearing, and dignified forbearance, but their words are silly prattle when their conduct is inconsistent with their precepts. There has been a kind of college libertinism prevailing of late which the public are only now beginning to appreciate, and we hope for a speedy and healthy reaction from that appreciation.

Blot out your schools of quackery, eschew your charlatan professors, and Europe will bow down in homage to the present system of American medical education, thus purified.

A case of suspected poisoning by oxalic acid, is reported by Dr. Skinner, in which acute peritonitis was the first prevailing symptom. The fluid vomited was examined, but was not found to contain any poison.

Dr. Thudichum, in the course of some severe strictures upon Dr. Skinner's view of the case, uses this language: "Giving Dr. Skinner full credit for the correctness of his diagnosis, as regards the existence of peritonitis, this would probably be the first case on record in which the cause of such a clear acute attack of peritonitis is ever alleged to have been an irritant poison." Dr. Thudichum should learn from the erudition of the profession in Chicago, that this is an every-day occurrence, a natural effect; but he would have us agree with the rest of the profession in viewing such a result as abnormal. The Dr. must certainly go to Chicago, and learn how oil of tansey and ergot act, and how they destroy the life of a woman, and save the reputation of a man, by a sort of peritonitis-producing legerdemain, only known to a favored few.

Why, sir, oil of tansey is more productive of peritonitis than the manipulations of the abortionist. You have yet much to learn, but Chicago is the only place I know of in which you can acquire this kind of information.

The following valuable observations will be read with interest, and I will not venture to condense them:

Observations on Stertor, and on the Varying Conditions upon which it is dependent; with the Treatment necessary for its Relief. By R. L. Bowles, Esq.

Mr. Bowles commenced by stating that in the majority of instances he had found from experiment that stertor arose from one of three conditions: 1st, from paralysis of the velum palati; 2nd, from the paralysed tongue lolling back in the throat; 3rd, from the presence of mucus in the pharynx and air passages. His attention was first attracted to this subject when assisting Dr. Marshall Hall in elucidating the subject of artificial respiration on the dead body. It was found that the position of the body invariably influenced the relations of the tongue, namely, that in the prone position it fell forwards and away from the pharynx; whereas, when the body was supine, it fell back towards the pharynx, and would form a serious obstacle to the passage of air into or out of the trachea. It was also observed that mucus or fluid ejected from the stomach tended to drain away in the prone position, and to remain in the back of the pharynx in the supine; and this would greatly increase the danger of apnœa in the latter. The author stated that in November, 1857, he was called to a case of apoplexy, in which coma and stertorous breathing had persisted for some hours; the patient was wholly unconscious and uninfluenced by external impressions, and the pupils were contracted and immovable. While watching the case, some fluid was ejected from the stomach, which lodged in the pharynx, and would have caused death by suffocation had not the patient been quickly turned on her side, and the fluid allowed to drain away. In this position the stertor entirely ceased, but on resuming the supine position it returned as loudly as before. The experiment of change of posture was tried several times, and always with the same result; and, what was equally remarkable, the general symptoms were greatly modified after the lateral position had been maintained for a few minutes; the pulse became calmer, the skin cooler and less bedewed with moisture, the eye sensible to the touch; and the general sensation returned to such an extent that the patient evinced signs of discomfort at the removal of a mustard poultice. In a case of epilepsy, in which stertorous breathing had supervened, the moment the lateral position was assumed the stertor ceased, and the patient very soon became conscious, and recovered. Other cases were related, all of which tended, with the foregoing, to demonstrate—1st, that the paralysed tongue *may*, under certain circumstances, cause even death by suffoca-

tion; 2nd, that stertor arises from the tongue falling back in the supine position of the body, so offering a serious impediment to the respiration; 3rd, that mucus (another respiratory impediment) drains away when the patient is placed on the side; and 4th, that great improvement of the general symptoms follows the establishment of easy breathing in the lateral position.

The anatomy of the parts was then referred to; and it was shown that the pharynx, having only a fixed boundary posteriorly, may have its capacity materially altered by the ever-varying positions of its sides, of the soft palate, the tongue, and the larynx. With the closed mouth, the tongue cannot, in the majority of cases, reach the back of the pharynx, as it is fixed to the inside of the symphysis of the jaw; but when the jaw drops, the symphysis describes the arc of a circle, and approaches very nearly to the spine, thus allowing the tongue to come in contact with the posterior wall of the pharynx.

Diagrams of some dissections were shown, to illustrate the position of the tongue and epiglottis in the various positions of the jaw and of the body. If the chin be bent upon the sternum by raising the head with pillows, the tongue will lie in dangerous proximity to the pharynx, even if the mouth be closed.

Stertor was divided by the author into the three following varieties:

1. Palatine stertor. In this, if the mouth be closed, the soft palate is pushed upwards and backwards by the base of the tongue, and thus narrows the opening between the palate and posterior wall of the pharynx. If the mouth be open, the velum palati drops upon the tongue, and vibrates as the air rushes between it and the tongue.

2. Pharyngeal stertor, which is the most frequent in apoplexy, and by far the most dangerous. This variety depends upon the base of the tongue dropping back into the pharynx, and acting as a serious impediment to the passage of air; it occurs when the mouth is wide open, and is a harsher and sharper noise than either of the other varieties.

3. Mucous stertor, which depends upon the presence of mucus in the bronchial tubes; it may exist alone, or in combination with either of the preceding varieties.

A case was related, to show that palatine stertor, with closure of the mouth, may accompany deep coma; but it was considered that it was the rule for persons in deep coma to breathe through the mouth, and for this reason; the muscles of the jaw being paralysed, the jaw drops and opens the mouth; whereas, the dilaters of the nose, being also paralysed, the alæ nasi are forcibly drawn by the in-going air towards the column

of the nose, and thus close the orifice of the nares altogether.

With reference to the importance of stertor, the author remarked that the impediment to the entrance of air into the lungs, as it tends to retard the flow of blood through the veins, might very possibly be the first step towards death in cases of apoplexy with degeneration of blood-vessels, or fracture with laceration of the sinuses or vessels of the brain; for the blood would make its way, where there was least resistance, through the wounded or ruptured vessel. If, however, there were no obstruction in its natural course, it would more probably follow that than turn aside through an opening, in which perhaps a coagulum had already formed. Besides the ultimate dangers which might result from a persistence of stertor in apoplectic and similar conditions, the more immediate dangers of the supine position were pointed out—*e. g.*, 1st, fluids or other foreign matters making their way into the larynx from the mouth or stomach; 2nd, the falling back of the tongue, causing sudden and complete apnœa, which may occur in all cases of paralysis, whether from syncope, apoplexy, concussion of the brain, chloroform poisoning, suffocation from carbonic acid or drowning; for if a disaster arise from any of the above conditions, the patient is almost invariably laid flat on the back.

The paper was concluded by the relation of a case, by Mr. Lewis, of Chester, of profound coma supervening upon several severe attacks of epilepsy, following each other in quick succession. When the patient was seen, the pupils were contracted and insensible; the pulse small, weak, and irregular; the surface pale, with cold, clammy perspiration; breathing irregular, slow, and extremely laborious. The stertor was very marked; very little air seemed to enter the lungs; the cheeks were puffed out during expiration. The patient was placed well over on his side. There was an immediate flow of saliva from the mouth, followed by a considerable quantity of sanio-mucous fluid. The breathing instantly became more free, and in less than a minute all stertor had ceased. The other symptoms gradually subsided, and in an hour's time, the bowels having been acted on by croton oil, there was a partial return to consciousness, and the next day the patient was walking about the wards of the asylum.

The following caption of an article in the London Lancet, for February, attracted my attention: "The Casues and Treatment of Erysipelas." I found, however, that the caption was for effect, and the article itself possessing no point of especial interest. Good "headings" are printers' signs; they attract attention; and when they do, the printers' end is gained.

A valuable paper on Diphtheria, by Dr. Ellis, will be read with avidity now, when this frightful disease is marching with fatal strides through our neighborhood:

The present epidemic has prevailed to a great extent, and in a severe form, since the second week in September, 1858, and the mortality has been large; latterly, however, the cases have decreased, though not a day passes without some fresh ones. Altogether, there have been 564 attacked, and 78 deaths. The first three cases (children) occurred at an isolated farm-house, about two miles from Crowle; these all succumbed in twelve days; after the most diligent research, they could not be traced to communication with others. The next, the child of a respectable ironmonger, took place four days afterwards in Crowle, still without any evidence of infection. Sporadic cases kept happening until Christmas, when the complaint began to assume an epidemic form. At the same time, inflammation of the glands of the neck, erythematous sore-throat, and tonsilitis, also prevailed. Both sexes, all ages and classes, have been the subjects of the disease; and in many instances it set in with great severity. The laboring population, small farmers, tradespeople, and children under twelve years of age were the principal sufferers, an infant of seven months being the youngest attacked. Amongst my brother's patients, a clergyman with his wife and daughter, took the disease; a little girl of my own was also the subject of it; and a draper lost his wife and both children from it.

With regard to the communicability of the disease from person to person, there have been the clearest and most irrefragible proofs, the period of incubation varying from three or four days to nearly a month. There have been several instances of a recurrence of the complaint, the second being occasionally fatal. Horses have also been affected by asimilar disease, and many have died from it.

Diphtheria here has been invariably characterized by the presence of a white or slightly yellowish exudation on the tonsils, uvula, velum, or pharynx; in severe cases appearing also on the posterior nares, larynx, trachea, and bronchial tubes. The membrane has been of varied consistence and thickness, according to the part affected. On the tonsils and velum it seemed to consist of an increased and altered secretion of the mucus peculiar to the part, composed as it is of cells, corpuscles, and epithelial scales, and this in some instances was quickly reproduced after its removal; lower down, as discharged by vomiting or expectoration, it was evidently fibrinous, forming casts of the trachea and its bifurcation into the bronchi. In many cases the removal of the exudation caused abrasion of the surface, with bleeding points; and the

membrane itself, especially from the trachea, displayed blood-corpuscles in patches, and in one instance, as examined by the microscope, a distinct fungoid growth in a state of putrefaction; the fœtor was generally very offensive. Preceding the appearance of the exudation for two or three days or more, the affected parts were swollen, highly congested, generally of a bright red color, but sometimes, livid; frequently there was a good deal of œdema of the tonsils and uvula, seeming as if infiltrated with serum, and this appearance continued after the patch had formed. Convulsions in several cases preceded, in one accompanied, and in two followed, the removal of the disease; death ensued in the last two instances, an adult and his child. The complaint was generally ushered in by much constitutional disturbance, as evidenced by febrile excitement, vomitng and headache, with suffusion of the eyes, followed by symptoms of depression and loathing of food. In three cases an eruption of bright-red spots or dots, small, distinct, not elevated or vesicular, accompanied the disease, and remained out three or four days; there was no desquamation. In one person, a married woman, menorrhagia ensued, and epistaxis in several, six of the latter being fatal. During the progress of the disease, the temperature of the skin became generally low, except in dyspnœal agony, when there was, of course, sweating. In nearly all the most severe cases there was profuse and fœtid muco-purulent discharge from the throat and nostrils; the submaxillary glands were frequently engorged, and in one instance suppuration followed. The urine was occasionally albuminous, but not generally. Diarrhœa proved fatal in four infants. Ulceration not unfrequently followed the removal of the exudation, and in one instance (a patient of my brother) an aperture remained in the left anterior pillar of the velum, sufficiently large to admit a quill, and causing much inconvenience. Regurgitation through the nostrils, from paralysis of the soft palate, was a frequent consequence, as well as altered voice. The nervous and muscular systems were much affected, anæmia, debility, and loss of power frequently occurring. Diplopia took place in five instances; complete paraplegia in two, the latter yielding to strychnine. Death generally happened from exhaustion or asphyxia, croupal symptoms often supervening. There has been no instance here of the disease being communicated by accidental inoculation, or the contact of the morbid secretion with a mucous or abraded surface; but in one case the exudation showed itself on the neck of a child blistered by the application of liquor ammonia, and also in a strumous, with a scald on the foot.

As regards the treatment of the epidemic, it has essentially consisted in the use of the chlorates—the tincture of the ses-

qui-chloride of iron, chlorate of potash, and hydrochloric acid, with gargles of the two last named. In many cases, a strong solution of the nitrate of silver, a dram to the ounce, was applied to the fauces by means of a sponge. Occasionally, sulphate of copper emetics were given with advantage, as also ipecacuanha. Turpentine, internally, was tried in some, but scarcely with any good result. Gentle aperients were generally premised, and the exudation, if possible, removed by a spoon or the polypus forceps. In cases of debility, preparations of iron and quinine were administered. And throughout the progress of the disease a liberal and generous diet was enjoined, consisting of broths, beef-tea, eggs, milk, wine, porter, and brandy. Tracheotomy was in no instance resorted to. In all the fatal cases, notwithstanding prompt, energetic, and decided means were used, the progress of the disease could scarcely, even for a time, be arrested.

P. S.—A very singular fact connected with the progress of the disease in this locality is, with the solitary exception of a child in Crowle, the entire immunity enjoyed by the Irish residents, numbering, probably, upwards of three hundred; they are chiefly located in Eastoft and Luddington, and afford almost our only examples of overcrowding, defective, sanitary conditions, and inattention to hygiene.—*London Lancet.*

Crowle, Bawtry, *January*, 1860.

Dr. J. N. Radcliffe read the report of the diphtheria subcommittee.

The facts of chief importance which have been ascertained by this inquiry may be summed up thus:—

1st. The probable occurrence of sporadic diphtheria in the counties of Kent and Essex in the years 1853 and 1854; also in different parts of the kingdom at intervals within the last twenty years.

2nd. The unusual prevalence of throat affections of all kinds, and not unfrequently of a peculiar kind, which might be described as of a *quasi* diphtheric character, prior to or contemporaneously with the present epidemic of diphtheria.

3rd. The concurrent or intercurrent prevalence, in the same locality, of epidemic diphtheria, with epidemic scarlet fever, and the occasional occurrence of a diphtheric affection of the fauces in scarlet fever.

The whole of these facts have an important bearing upon the history of the development of the present epidemic of diphtheria;—1st, in reference to the introduction of the disease into the kingdom from without; 2nd, in reference to the causes which have led to the development of the epidemic; 3rd, in reference to the relation of the disease to cognate

affections and to scarlet fever. Upon all these points the foregoing facts are valuable as suggestive of further inquiry, and as indicating the direction in which that inquiry should tend as well in those districts in which the epidemic has prevailed as in those in which it now prevails.

4th. The doubtful contagiousness of the disease in some districts; its *undoubted* contagiousness in others.

5th. The insanitary state of the localities in which the disease occurred.

7th. The greater liability to the disease being in the first decennium, or, to narrow the question, the second quinquennium of life.

7th. The proportion of *males* in 100 cases being 42·3; of *females* 58·2.

8th. The nature of the treatment indicated:—(1) The application of more or less stimulating or caustic applications to the diseased parts. (2) The regulation of the excretions. (3) The sustentation of the powers of the system.

CASES OF PERFORATION OF THE MEMBRANE OF THE TYMPANUM.

TRANSLATED FROM THE GERMAN, BY S. BRANDEIS, M.D.

Dr. T. H. Clarke had examined seventy-five cases of perforation of the tympanum, in respect to the relative delicacy of the hearing faculty. In six of them the ticking of a watch was not perceived at any distance whatever. In eleven cases it could only be perceived when the watch touched the external ear. In twenty-three cases at a distance of three inches. In sixteen cases at a distance of from six inches to one foot. In fifteen cases from one to two feet; and in four cases from two to four feet. Sound ears apprehended the ticking at a distance of fourteen and fifteen feet.

Bonafont, on examination of the membranum tympanum, while a military band was playing its loudest music, could not perceive the slightest vibrations, but he discovered that a red line produced by a vessel filled with blood, which ran along the attachment of the hammer, disappeared when the music ceased.

Further investigations have shown that low sounds did not cause this vascular injection, unless they were produced with great force by brass instruments. String instruments, like the violin, or contra-bass, did not cause the injection of the vein, but high notes always produced it from whatever instrument they proceeded.

The tensor tympani only expands the the tympanitic membrane to a partial extent; its full expansion requires the co-operation of the stapedius.

Every injury of the membrane of the tympanum impairs hearing, a lesion of its anterior part disturbs the perception of low notes, while one on the posterior part impairs the perception of high notes.

A defect of the malleus and incus may exist without loss of hearing, but the defect of the stapedius is constantly associated with a complete loss of hearing.

In good singers the tympanitic membrane is so placed that sounds are received upon its entire surface. An oblique position of the membrane weakens hearing, and renders it particularly obtuse in reference to certain qualities of sound.—*Canstatt's Jahresbericht*, 1859.

IMMEDIATE CURE FOR "IN-GROWING NAIL."

Messrs. Editors,—Dr. Lorinser's article on this troublesome affection, translated for the *Journal*, and published Dec. 15th, reminds me to do what I have been many times on the point of doing, and that is, to communicate a mode of treatment which I have pursued in these cases for over twenty years. It is simply to cauterize the part with hot tallow.

The patient on whom I first tried this plan was a young lady, who had been unable to put on a shoe for several months, and decidedly the worst case that I have ever seen. The disease had been of long standing. The edge of the nail was deeply undermined, the granulations formed a high ridge, partly covered with skin, and pus constantly oozed from the root of the nail. The whole toe was swollen and extremely tender and painful. My mode of proceeding was this: I put a very small piece of tallow in a spoon, and heated it over a lamp till it became very hot, and dropped two or three drops between the nail and the granulations. The effect was almost magical. Pain and tenderness were at once relieved, and in a few days the granulations were all gone, the diseased surface dry and destitute of feeling, and the edge of the nail exposed so as to admit of being pared away without any inconvenience. The cure was complete, and the trouble never returned.—*Boston Med. and Surg. Journal.*

Pharmaceutical Department.

By THOS. E. JENKINS, Pharmaceutist.

Tincture of Opium.—The Pharmaceutical Society of Antwerp has employed a commission composed of its members to determine the best menstruum for the preparation of tincture of opium. It has arrived at the following results:

1. Good opium gives, when treated with water, less extract than bad or adulterated.

2. By warm digestion, a stronger solution is obtained than by cold infusion.

3. Alcohol must be preferred to wine in the preparation of the tincture of opium.

4. Narcotine, although alone insoluble in water, becomes partially extracted with the other ingredients of opium. When it is advisable to avoid the removal of narcotine, proceed as follows: Treat carefully prepared aqueous extract of opium with boiling alcohol. This dissolves out the narcotine and morphine, from which solution, when cold, the narcotine separates.

After the precipitation, whatever ingredients are necessary to form the tincture are to be added to the alcoholic solution. *Am. Jour. of Pharmacy.*

Process for Giving Various Objects a Pearly Luster.—To produce the iridescence of the mother of pearl on stone, glass, metal, resin, paper, silk, leather, etc., Reinsch adopts the following process: 2 parts of solution of copal, 2 parts of that of sandarach, and 4 parts of solution of damara resin (equal parts of resin and absolute alcohol), are mixed with half their volume of oil of bergamot or rosemary. This mixture is to be evaporated to the thickness of castor oil. If this varnish be then drawn by means of a feather or brush over the surface of some water, it will form a beautifully iridescent pellicle. This film is now to be applied to the objects which are to be rendered

iridescent. The vessel in which the water is contained, on which the pellicle has been produced, must, therefore, be as large as or larger than these objects. The water should have about 5 per cent. of pure solution of lime added to it; its temperature should be kept at about 72°. The objects to be dried in the sun.—*Jour. of Pharmacy.*

Chemistry in its Relation to Physiology, Medicine, and Pharmacy.—To allow oneself to be wholly absorbed by the study of a particular science as such, is the privilege of those only that have leisure and opportunities to do so, and are under no necessity to follow other callings. With the majority of mankind this is not the case, and to them it appears almost impossible to appreciate the charms of pure science. But when the latter is taken up in one of its applications to common life, the necessities and wishes of man, a general interest soon becomes apparent, for the link is found wherewith to connect in his mind the utility of applied science with the beauties of its truths. The merit of a so-called popular demonstration of science, therefore, consists much less in having awakened an interest in the same than to have satisfied an unconscious yearning for explanation. And why is it that of late professional men of the first order have thought fit to lay before the world at large, in a popularly comprehensive form, the results of scientific investigations? The cause of it is that chemistry has tried, and in doing so partly succeeded, to solve questions bearing an intimate relation to the life, the health, the well-being of man, for which, unquestionably, interest enough is found everywhere.

Physiology, the science which embraces the whole process of animal life, its sustenance, development, and propagation, is pre-eminently the branch through which modern chemistry has been diffused in larger circles, and this is its most promising field. On a great many phenomena of every-day life, upon many obscure points in the mysterious working of organic life, chemistry has shed a brilliant light; and this has induced very many to seek a closer acquaintance with a science which is to furnish the key to the great labyrinth.

What is life? This has always been a prominent question of science. Various have been the modes by which theosophical, philosophic-speculative, alchemystic, anatomical, mechanical, physical, and chemical schools have been trying to solve the eternal riddle, and from the dark oracle of mysterious waters to the astrological explanation of the firmament, no manifestation has been left without the attribute of some

influence, with or without cause, on organic life. The importance given to them has always been temporary, rising and falling with the success of one or the other. For a time the source of life was looked for in the neutralization of acids by alkalies; then, upon the discovery of the microscope and its application, the question was tried to be solved by the minute division of matter; again, the experiments on animal electricity have made of the body of man an electrical battery, and charges and discharges, attractions and repulsions, as its functions, while the transcendental philosophy of Hegel tried itself in hyperbolical images.

That period is one of the more recent which held forth the doctrine that the phenomena of life are the results of a peculiar innate force, the *vital power*. It may as well be admitted that this definition has retarded rather than promoted the penetration into a better knowledge of vital phenomena. For to every closer question there was always the safe refuge of an unknown vital force. As to the science of the present day, it regards, instructed by anatomy and microscopy, animal as well as vegetable organisms to be made up of wonderfully small and tender formations of cells, vesicles, and tissues, which, according to the chemist, consist of a certain number of elementary substances mutually obedient to chemical affinity, and in which physical science sees in operation the laws of gravitation, of heat, of electricity, of endosmosis, of capillary attraction, of elasticity, and so on.

Adopting this view, life appears to us as the sum of the action of chemical and physical forces within the organization under the same laws which obtain outside of it. There is no peculiar force by which the effect of the laws mentioned can be suspended or overruled, or thrown into channels alien to them in their ordinary conditions. Yet it is as evident that such a multitude of forces converging upon so narrow and finely constructed space as the organism, must produce a number of highly complicated phases, qualifying and intersecting each other, and thus render their study extremely difficult. This complicated nature of vital phenomena explains why neither anatomy nor physical or chemical science singly are able to explain life, and combined they must act to uncoil the mystery.

Very essential points of organic life, however, remain inaccessible to natural science or the means at present at its command. Among these the cause of the shape of the most simple forms, as cells and tissues, as well as of those resulting from their grouping. It is here as with the crystalized mineral; of this we know the accurate chemical constitution and the geometrical relations of its form, but are as much in the

dark about the reason by which the particles of one mineral are arranged with unchangeable regularity in cubes and those of another in hexagons. It is at this point, especially, that we are reminded of the existence of on All-present Vital Force, and in that sense the name is adopted by the philosopher.

What now rightly belongs to chemistry of the explanation of organic life? Certainly the greatest share; for all those changes which matter undergoes during its assimilation, transformation, or secretion, can only be explained by the aid of chemical research. Since our space does not allow us to enumerate the many laborious investigations of chemists into organic life, we will briefly give the more prominent facts so far established.

1. Organic bodies, both of the animal and vegetable kingdom, consist of a limited number of elementary substances. In the order of quantity these are oxygen, carbon, hydrogen, nitrogen, calcium, sulphur, silicium, potassium, sodium, magnesium, phosphorus, chlorine, iron. Besides these, some other substances are occasionally found, but only casually or in so insignificant a quantity as to render their presence to appear rather as an accidental occurrence.

2. No organic formation can be produced by the direct combination of its elementary ingredients, but in all cases an organized seed or ovule is required.

3. No organic body possesses the power of producing any elementary substance or to convert one element into another, but whatever is found in it or secreted from it, has previously been taken up from without.

4. Plants subsist on inorganic chemical compounds—water, carbonic acid, and ammonia being their principal nourishment. This food serves merely as increase to their substance.

5. The mineral matter remaining on incineration of a plant, in the form of ashes, though but a small proportion, must be considered as an essential ingredient to the plant. They are introduced into the latter through its roots from the soil, dissolved in water. All plants contain quantities and kinds of them, and, though modulations take place, no plant can prosper or propagate in a soil destitute of such mineral substances as silicic acid, potassa, soda, lime, phosphoric acid, and some others.

6. Man and beast require as food organic substances either of animal or vegetable origin. Their nourishment serves a three-fold purpose; to increase the mass of the body as long as it continues to grow, to replace that which is consumed, and lastly, to sustain respiration.

7. Every movement of the animal body entails, or is entailed by, a corresponding expense or consumption of its animal sub-

stance. Nitrogenous membranes, as especially the muscle, can be replaced only be nitrogenous food. Hence the latter is rega ded as nourishment proper, plastic nutriment, and its value is held to be proportional to its richness in nitrogen. Substances destitute of nitrogen, such as fat, starch, and sugar, cannot keep up either the growth or the life of an animal for any length of time.

8. With each inhalation of breath the animal body takes up a certain quantity of oxygen, which enters into chemical combinations within its organization. The corresponding amount of heat produced hereby is communicated to the blood, and serves to support the general warmth. Breath, when exhaled, consists of the products of an oxidation—of carbonic acid and water. With each respiration, consequently, the substance of the body suffers a loss in quantity.

9. The loss sustained by breathing must be made up by food, which purpose is served by a-nitrogenous substances, fat, starch, and sugar; hence the designation as caloric or respiratory nutriment. Their consumption has been demonstrated to be proportional with the density and temperature of the air, and with the frequency of the breath.

10. Animals living on meat, blood, or milk, find in their nutriment he elementary substances already formed into those compounds of which their own body consists. Their digestive process is therefore short and simple, and is founded less on chemical changes. It is rather an act of dissolution, of assimilation of the useful, and excretion of the inert portions.

11. Gramnivorous animals have in vegetable food such chemical compounds as are, if not identical, yet closely related in constitution with their muscular fibre and albuminous formations; and so far the act of digestion in their case also is not so much one of chemical change as of parting by dissolution. But vegetable matter, as for instance hay, besides its assimilable compounds, contains, associated with them, a large proportion of insoluble substances, useless and indigestible, as the woody fibre or cellulose. Consequently digestion in the gramnivorous animals is more protracted and complicated, as shown by the digestive apparatus of the horse or ox.

12. Albeit digestion itself appears less as a process of chemical transubstantiation, yet it is followed or accompanied by a number of real chemical changes. As examples of chemical processes within the body, take the action of atmospheric oxygen, inhaled with the breath, upon blood, the transformation of animal substance decomposed by the motion of the membranes into a number of compounds which are excreted through the kidneys, lastly the transmutation of starch and sugar into fat, and so on.—*Amer. Drug. Cir. and Chem. Gaz.*

Modern Conveniences—Leaden Reservoirs—Lead Pipe—Copper Boilers and Bell Metal.—Messrs. Editors,—I will not encroach upon your pages by a lengthy article upon the above subjects, but I would respectfully inquire of those who make chemistry a specialty, of the medical profession, and of the public at large, if in the middle of the nineteenth century, this boasted age of scientific advancement and artistic skill, it is not disgracefully humiliating that so many in the community must be prematurely consigned to the grave, by daily swallowing poison introduced into their food by the unsafe arrangement and ignorant and careless management, of what are termed "modern conveniences."

Having recently been called to attend several cases of severe colic, induced by eating cranberries and apples stewed in copper and bell-metal vessels, and still more recently having discovered that the members of a family* in one of the finest residences in Boston had been slowly and seriously poisoned by the cook (who was ignorant of the danger) having, for a long period, been using the water drawn from the copper boiler, connecting by a lead pipe with a lead reservoir, in preparing the tea and coffee, and boiling the vegetables; and knowing this to be no uncommon occurrence, I can not but envy our ancestors, who (although they sometimes were made sick by the use of bell-metal) drank pure water from "the Old Oaken Bucket," and were blessedly ignorant of "modern conveniences" by which we are so luxuriously poisoned, and finally die, under the scientific cognomens of "gastritis," "enteritis," "carcinus," and "paralysis."

But surely some method can be devised by which we can enjoy the benefits of modern improvements, without such risk to health and life. Let water be introduced into kitchens only through *iron*, *glass*, *wood*, or *gutta percha*. So arrange the hot-water apparatus that it can only be drawn in the chambers where it is required for bathing, etc., and once a week or more frequently if necessary, let on the water in the wash-room by a lock-faucet the key of which can be kept in a secure place. Banish forever from the kitchen, lead pipe, copper vessels, and copper covers (if the copper is tinned, the tin is soon worn off), and families may feel comparatively safe from domestic poisoning.

One suggestion more, and I have done. Should an individual prefer to take lead and copper with his sustenance, perhaps it might be considered oppressive to deny him the privilege. Yet it would seem but just, that those who do not admire these paralysing condiments, should be protected by the legal

* The water drunk by the family alluded to above, has been analysed by Dr. A. A. Hayes, exhibiting a fearful result.

appointment of judicious inspectors, whose duty it shold bue to examine the culinary apparatus in all our public institutions, hotels, confectionaries, and restaurants.

A sanitary provision of this nature, if rigidly enforced, would we sincerely believe, materially diminish the records of mortality.—*Ib.* CHAS. M. WINDSHIP. M.D.

Roxbury, *Jan. 2nd*, 1860.

Charcoal.—Charcoal surpasses all other substances in the power which it possesses of condensing ammonia within its pores, particularly when it has been previously heated to redness. It absorbs ninety times its volume of ammoniacal gas, which may be again separated by again moistening it with water. It is by virtue of this power that the roots of plants are supplied in charcoal exactly as in humus, with an atmosphere of carbonic acid and air, which is renewed as quickly as it is abstracted. Charcoal has a physical as well as a chemical effect on soils, which is decidedly useful. It renders them, as far as it is present, light and friable, and gives additional warmth to them by its color, which absorbs and retains readily the rays of the sun during the day. Wherever charcoal has been applied, rust never affects the growth of wheat.—*Liebig.*

We extract the following items from the American Journal of Pharmacy, for March, 1860. Dr. R. H. Stabler says:

"I prepared a portion of Propylamin from herring pickle, and induced some of our physicians to use it in their practice, which resulted in establishing its reputation amongst us as an indispensable remedy. It has been in use here about nine months, and has been administered in about fifty cases with most marked effect, seldom failing to give relief in twenty-four or thirty-six hours in acute cases, and a longer time in chronic rheumatism. I think its great value is demonstrated in acute rheumatism of young subjects, where the disease, unless quickly controlled, is so liable to attack the structures of the heart. One case of the kind presented in the practice of Dr. I. J. Murphy, of this place, in a little boy; commencing with swelling of the knees, ancles and other joints, high fever, full, bounding pulse, and other symptoms promising a long, tedious case under the usual modes of treatment; he was directed to take the propylamin in the usual doses, [2 or 3 drops in water for an adult], and was convalescent in three days. Another physician told me a few days ago he had used it with much satisfaction and uniform success.

A good deal has been published on the preparation and ad-

ministration of the remedy in the Journal and other periodicals, but nothing as to its use in this country that I have met with; thinking it might interest thy readers to describe our experience with it, and perhaps induce further trials of it, is my apology for troubling thee with this letter.

We are satisfied that the physicians of America are too much in the habit of overlooking the valuable properties of their own indigenous remedies, and it is probable that this remark holds especially true in reference to the vegetable alteratives, or blood depurants, one of the very best of which is the Burdock. We insert a formula from Dr. Grahame, for the preparation of a fluid extract of this root, by so simple a process that every physician can with perfect convenience avail himself of the method.

Some demand for this preparation having arisen in the establishment of the writer, and not finding a published formula for it, the following is suggested as productive of a result every way satisfactory.

It is believed that this fluid extract might be advantageously substituted for that of sarsaparilla, as a more efficient and reliable alterative, or at least as a valuable addition to it.

Take of Burdock, in powder, No. 50, . . sixteen ounces.
Diluted Alcohol (Alcohol $4\frac{1}{2}$ parts, Water $3\frac{1}{2}$ parts,) a sufficient quantity.

Dampen the powder with the menstruum and pack it in a suitable glass displacer; having covered the surface with a piece of muslin or perforated paper, pour on the menstruum and continue the percolation to exhaustion, reserving one and a half ounce of the first runnings, evaporate the remainder over a water bath until reduced to nine fluid ounces, to which add four ounces of sugar and dissolve. Strain, if necessary, and add the reserved portion.

The dose of the extract is one teaspoonful, representing eighty grains of the root.

Dr. E. R. Squibb has read before the King's County Medical Society (see New York Journal of Medicine for March) a paper entitled "Notes upon New Remedies," from which we make the following extracts:

Since the last decennial revision of the National Pharmacopœia an unusual number of new remedies have been proposed, and brought into use in various sections of the profession.

Among these many have never, from various reasons, reached the general profession further than by a first cursory indefinite notice. Others, more frequently noticed, and urged with more pretension have attracted more attention and publicity; and upon hypothetical grounds, supported more by science and logic than by practical utility, and more by quackish puffing and advertising than by anything beside, have become so widely and generally known as to require no notice here. To this class belong the hypophosphites, the so-called "chemical food," and other popular salts and sirups of phosphates.

To neither of these classes does the writer propose to ask the attention of the Society; but rather to a far less numerous class wherein better chemistry, supported by better logic and confirmed in some degree by practical application, gives promise of somewhat more definite and permanent results in general practice. * * * *

Chromic acid was first used as a caustic by Prof. Sigmund of Vienna, by recommendation of Dr. Heller, and the accounts of its uses and some experiments with it were translated into the Dublin Quarterly Journal, No. XIII., p. 250. It was used with success in the venereal wards of the University College Hospital of London, by Mr. Marshall, and an abstract from these notices of its use may be found in Ranking's Abstract, No. XXV., p. 149, and in the United States Dispensatory, 11th edition, p. 1392. In the New Orleans Medical News of Nov., 1857, Dr. I. L. Crawcour publishes two cases in which he used it to remove morbid growths from the scalp with the alleged advantages that it caused little pain, left but little scar, and did not destroy the hair-bulbs. In view of its chemical character the latter statement is a little surprising.

Acidum sulphurosum, a solution of sulphurous acid gas in water for medical purposes, is best prepared, according to Prof. Proctor, (see Amer. Jour. Pharm., Vol. XXIX., p. 110), by passing the gas from four ounces of copper turnings, and eight fluid ounces of sulphuric acid into four pints of water, and preserving the solution in small bottles well filled and well corked.

This is a colorless solution, with a strong acid taste and reaction, and the well-known odor of burning sulphur. When fit for medical use it should give no precipitate with solution of chlorid of barium, nor with lime-water, so long as the sulphurous acid is in excess.

The acid prepared as above is diluted with twice its volume of water for use, and is applied by means of cloth soaked in it, covered with oiled silk. Its peculiar action as a remedy is supposed to depend upon its chemical property as a deoxydizing agent, and it is therefore in effect, as in chemical character,

exactly opposite to chromic acid. In its application to diseases which depend upon the growth of parasitic plants and animalculæ, it probably kills them by asphyxia or suffocation, by depriving them of oxygen.

Dr. Wm. Jenner, of University College Hospital, London, was the first to use this remedy as a prompt and active "parasiticide," as he calls it. In a paper by him, published in the London Medical Times and Gazette of Dec., 1857, p. 649, he highly extols its use in tinea favosa and kindred diseases. See also Braithwaite, XXXVII., p. 180.

Dr. Bennett, of Edinburgh, also used it successfully in inveterate cases of similar character.

The alleged advantages are that it is prompt and efficient, and successful where other means fail, while it is far more cleanly and manageable than many other of the commonly applied topical applications. (See United States Dispensatory, 11th ed., p. 1492.) The writer has heard of its having been used with success, chiefly in Philadelphia, but nothing definite of cases or results has been published that he is aware of.

In reference to the "iron alums," he says:

Mr. Lindsey Blyth, of St. Mary's Hospital, London, in Dec., 1853, brought to the notice of the profession, through the London Pharm. Journal, two iron alums—the potassio-ferric, and ammonia-ferric—both of which had been used with success in that hospital. Dr. Wm. Tyler Smith, of London, in his work upon the Pathology and Treatment of Leucorrhœa, states that he commenced the use of them as early as 1852, and from prolonged experience knows no internal remedy that equals them in the treatment of leucorrhœa. Further experience among other observers, both in England and in this country, seems to indicate that of the two, the ammonia-alum is preferable, chiefly in consequence of its more ready solubility, and that it is a remedy of much therapeutic value. The two Drs. Darrach, of Philadelphia, were the first to use it in this country; and it was first prepared here, for them, by Mr. William Hodgson, Jr., of Philadelphia, who published the formula in the Amer. Jour. Pharm. for July, 1856, p. 305. Mr. Hodgson afterward improved the details of his formula, and published the results in the same journal of the same year, p. 478. The results of the observations of Drs. Darrach seem to confirm the statements of Drs. Blyth and Smith, and have led to a more extended use of the salt. Similar in action to perchlorid of iron, it is not stimulant like that preparation and seldom causes nausea or headache, while as an astringent tonic it is more effective. It is said to be more astringent than common alum, and its tendency to constipate has led to

its employment in "choleraic diarrhea and dysentery," with advantage. Its topical use as an injection or wash is said to be very efficacious. For an abstract notice of this preparation see U. S. Disp., 11th edit., p 1490.

We can only afford further space for a portion of his remarks in regard to the syrup of pyrophosphate of iron, and to the permanganate of potash. Of the former he says:

This syrup was brought to the notice of some members of the profession here, and has been pretty freely used in a number of cases, by a number of observers. Drs. Hutchison, Kissam, Bell, Minor, King, Isaacs, Enos, Crane, and Smith have used it here. Two of these gentlemen used it in conjunction with other tonics and therefore could not judge accurately of its value; Dr. Minor and the writer each used it in one case without any apparent effect. The sum of the opinions of the remainder of the practitioners named, however, is decidedly in favor of its importance as a tonic well adapted to a class of cases not uncommonly met with, where other tonics, and particularly preparations of iron, are not well borne. In no case has it produced tinnitus, headache, nausea, or constipation, as other preparations of iron are liable to do. In one case in which Dr. Bell used it with otherwise good effect, it repeatedly developed a tendency to diarrhea, and its administration had to be as often suspended till the appetite would again fall off. Dr. Hutchison also found one similar case in his experience with it. In one of these cases, at least, there was an exceedingly susceptible and irritable condition of the mucous membranes, and in both the effect was doubtless produced by the citrate of ammonia aided by the sugar, and not by the pyrophosphate of iron. The number of physicians who have used this preparation here is probably not double that of those named, while the whole quantity used amounts to about forty-five pounds. If it be fair to infer from continued or an increasing use of it in the hands of those not named, because not heard from in regard to it, that it has had a similar average of success, the deduction would be that in an important though perhaps not a large class of cases its peculiar properties and adaptations make it a valuable and important agent.

Of the latter (Potassæ Permanganas) he says:

As an escharotic it is used in powder sprinkled upon the part, and is said to produce less pain than other escharotics, while it is equally effective, and possesses the collateral property of disinfecting or deodorizing the surfaces. It is, however, chiefly as a stimulant deodorizing lotion or injection that it is used with greatest benefit and effect. It keeps down exuberant granulations and controls or destroys morbid growths

with unusual promptitude and success, and is susceptible, by varying the strength of the solution, of a wide range of effect from the prompt destruction of morbid tissues down to the most gentle stimulation of granulating surfaces; while its application, in however dilute solutions, serves to cleanse and deodorize the foulest ulcers. It is said to be peculiarly applicable to those cases of cancerous disease, especially of the uterus, which often become almost insupportable from the fœtor of the discharges. By the use of a solution of twenty grains to the pint of water, applied by injection or wash, the offensive discharges are changed at once, and the comfort of both the patient and attendants very materially improved. From a proportion of twenty or ten grains to the fluid ounce of distilled water, when a slight escharotic or prompt stimulant effect is desired, down to twenty or even ten grains to the pint as a disinfectant, it has been used with much advantage. It has also been used internally in diabetes, chiefly by Mr. Sampson, of London, in doses of three or four grains three times a day in solution. (See Pharm. Jour. and Trans., July, 1850, p. 18.) As as external remedy it appears to have been first brought prominently to the notice of the profession by Dr. J. F. Girdwood, of London, in a paper published in the Lancet of Sept., 1857, p. 269. An abridgment of this paper may be found in Braithwaite's Retrospect, 1858, No. 36, p. 261. A short notice of its uses may also be found in the U. S. Disp., 11th ed., p. 1447. Other more extended notices are published in the Lancet for 1858, p. 33, and in the Pacific Medical and Surgical Journal, 1858, p. 331.

NEW PUBLICATIONS.

Headland *on the Action of Medicines. Third edition*, 1859.—This is a book of exceeding interest to the teacher, the practitioner, or the student of medicine. It is evidently the result of great labor and high scientific attainments. It is a prize essay which has been revised and extended to 450 pages. It is as free from dogmatism as it is full of experiment. It is utterly devoid of all attempt at ornamentation, and leads you at once, by plain words, to the subject matter.

How many subjects of controversy it has settled, we are not willing to determine; it deals with matters very difficult of settlement: that of the modus-operandi of medicines.

That medicine as a science and as an art has made large

advances in the last twenty-five years, no one, we preusme, will be disposed to question; to him who holds that the world does not move, we commend this volume; and if, after a careful reading, he still thinks that Physic has made no advance, and that the physicians of to-day are no more successful in their treatment of disease than those of a thousand years, aye, even of fifty years ago, we can only entertain toward him the same feeling of commiseration which was extended to that one of old who was joined to his idols, and—"let him alone."

Dr. Headland lays down ten PROPOSITIONS, which are discussed with no ordinary ability; the first of which is, that "*the majority of medicines must obtain entry into the blood, or internal fluids of the body, before their action can be manifested;*" which proposition he undertakes to prove by four considerations. 1st, "a medicine introduced into the system elsewhere, acts in the same way as when introduced into the stomach," and this brings under review the endermic mode of medication, which, beyond all question, has a great deal of good in it; and the system of transfusion, which, though sustaining very freely Dr. H.'s proposition, is not so full of promise to the patient. The action of tartar, of tobacco, of castor oil, of mercury, together with many other agents, will readily occur to every one. If it is objected that, though these substances may be introduced into the vascular system yet their action is dependent upon the nerves, he maintains, secondly, that "*the continuity of nerves is not necessary to effects, but vascular connection is necessary;*" in proof of which he refers to the experiment of Magendie, in which he "inserted the urari poison into the leg of a dog," which was then connected with the trunk only by quills uniting the divided ends of the main vessels, "it took effect rapidly;" and that of Sir B. Brodie, in which, having divided all the nerves, he inserted the same poison into the foot of a rabbit, with the same prompt result; and this further experiment by Sir B. Brodie severing the leg of a dog saving only the principal nerve, he inserted urari poison in the foot, and discovered no effect whatever.

If it be contended that some poisons act with such rapidity as to forbid the idea of their absorption, he maintains, thirdly, "*the circulation is sufficiently rapid to account for the operations of those poisons which act most quickly by influencing the nerve cuerres.*

He refers to experiments of M. Poisseuille, and Dr. Blake, proving that "a chemical substance traversed the whole circulation of a dog in nine seconds, and of a horse in twenty seconds." Dr. Headland, finally, upon this proposition, maintains that "the great majority of medicines have been detected in the blood, and in the secretions formed out of it." Thus, Allen discovered daturia in the urine of one poisoned by stramonium. Runge discovered the principles of henbane and belladonna. Klitzinsky found in the urine the elements of a soluble mineral salt, which had been used as a gargle for the throat. Ragsky found chloroform in the blood, as Dr. Snow and Dr. Taylor have done after him. Dr. Golding Bird found the urine blue after the use of indigo. Krimer found prussic acid in the blood. Sulphur is found in the perspiration, and mercury in the saliva. We do not hesitate to say that these multiplied considerations look very much like proof of the proposition that the circulation is the medium through which medicinal substances make their impression on the system.

PROPOSITION II. "*That the great majority of medicines are capable of solution in the gastric or intestinal secretions, and pass without material change, by a process of absorption, through the coats of the stomach and intestines, to enter the capillaries of the portal system of veins.*"

This is a very important proposition, and covers a good deal of ground, taking in the laws and functions of the gastric and intestinal secretions, the laws of endosmosis, and the mode in which medicines are reduced to a state of solution.

In regard to the secretions, the first thing done by the stomach, upon the introduction of a foreign substance, is to pour out a peculiar acid fluid, called the gastric juice. This is the solvent of food and physic, reducing all soluble matters to a "watery pulp." This pulp, in great part, passes through the coats of the stomach and the intestines, to the vascular system, and thus to the system at large. In proof of the absorbent power of the stomach, a ligature round the intestine below the pylorus, does not prevent the passage of soluble matters, which it may contain, into the circulation. In proof of the same power on the part of the intestines, is the disappearance of every day injections.

In regard to endosmotic and exosmotic action, the author considers that the passage of fluids through the membranes enclosing them is dependent chiefly on "the diversity of the liquids, the lighter passing to the heavier, the attraction for the intervening membrane, the affinity of the fluids for each other, the motion of the fluids, and pressure on one side of the membrane."

Passing by several propositions, which are little more than amplifications of those already noticed, we come to the 7th, which states that "a class of medicines called Hæmatics act while in the blood, which they influence. That their action is permanent."

"That of these, some, called restoratives, act by supplying, or causing to be supplied, a material wanting, and may remain in the blood."

"That others, called Catalytics, act so as to counteract a morbid material or process, and must pass out of the body."

The author then goes on to say that "a medicine while in the blood, may behave in one of two ways: its tendency may be toward the nerves, or glands, or muscular fibre, using the blood only as a vehicle in which it travels to the point at which it proposes to do business. Such," he says, "are the neurotics, the astringents, the eliminatives."

But there is a much more important class, whose action is upon the blood itself, modifying it for good or for evil.

It is the business of this class of remedies to cure diseases which arise from some fault of the system at large—food to the hungry man illustrates the idea. And here he makes a very sensible distinction between the physiological and the therapeutical action of medicines. The Hæmatics given to a "healthy man are either inoperative or poisonous;" acids, and alkalies in small doses, to a healthy man, produce little or no effect—in large doses they cause wasting; whereas arsenic, mercury, and the catalytics generally, are more or less poisonous to a healthy man. But suppose the existence of a more or less diseased condition, the case is changed. The alkali is required to neutralize an abnormal acidity, and the mercury counteracts in the blood the syphititic poison. So that the therapeutical use of hæmatics differs from their physiological action, inasmuch as it demands the pre-existence of some special condition of the system;" all which sounds very like good sense.

There is a very palpable difference, however, between the two classes of hæmatic medicines, the restoratives and catalytic; thus, the restoratives supply a want of the system, and remain when once introduced; the catalytics arrest morbid processes, and pass out.

The author here devotes many pages to a consideration of the action of particular medicines belonging to the class hæmatics, and as a type of the whole he places food at the head.

His practical remarks upon the administration of diet in disease, are worthy the attention of physicians. In inflammatory and febrile diseases, the system demands but little food, and the solicitude manifested by nurses and friends to *keep up* the patient by all sorts of provocatives to appetite, can not be met too sternly by the physician. It would be very difficult to lay down anything like a rule upon this subject, and yet, if we were called upon for an impromptu law we should say, that in all forms of disease, where the digestive apparatus is unimpaired, let the patient have, within reasonable limits, just such food as his taste calls for. It is a sort of physical instinct which is worth more than any speculation of ours, and influences for good the mind as well as body of him whose nature demands it.

A liberal space is allowed to the consideration of the alkalies:

"That they pass into the blood is proved by their solubility and their appearance in the secretions; and that they are natural to it we know, because they are all found in it." He speaks of ammonia as the most volatile, and where the design is to secure the operation of an alkali on the system, he prefers some of the other articles of this class, giving as a reason the liability of ammonia to be "excreted by the exhalent surfaces of the skin and lungs." Does not this very fact give it a claim to the highest consideration? Another alkali may more thoroughly alkalize the mass of the blood, but does any other so promptly relieve a state of engorgement? Certainly the pneumonias, the catarrhs, and many of the diseases characterized by an external eruption—the exanthemata—have been thus treated by us for a number of years with reasonable satisfaction, upon the principle of its "rapid excretion by the exhalent surfaces of the lungs and skin."

"The alkalies are useful in gout and rheumatism in diminishing the acidity of the blood and of the secretions. They dissolve the fats, prevent their deposition in the tissues, and cause their excretion from the body; prevent the coagulation of fibrin; retard nutrition, and cause spareness of the system." Do they control, or in any degree modify, inflammatory action? With all becoming dignity we repudiate hobbies, but frankly confess a decided liking for the alkalies.

Tonics.—This is an interesting field; it includes in our author's view "only the bitter principles of vegetables." Their action is two-fold: they brace up in debility, and arrest that periodicity which results from marsh miasm.

"Do these medicines act primarily in the blood, or on the nerves? Is their action permanent? Are there any substances in the blood which resemble them? May they remain in the blood, or are they excreted? If acting in the blood, are they wont to effect a cure by supplying to it a material wanting, or, by counteracting in it, a morbid process?" Surely these will be admitted to be very important questions. Quinia is taken as a type, and Dr. H. says that we have "positive proof of its absorption, Tiedemann and Gmelin having detected it in the blood of a patient to whom it was administered." Does it act then on the blood, or on the nerves?

Pereira speaks of quinine as haviug "a special and ill-understood action, as that of mercury in syphilis."

Neligan takes the same view, and calls its action specific. Dr. Dundas regards its action as directed to the nervous power. Dr. Ballard says that "it acts first on the nerves, and second on the muscles." Dr. Billings says that "tonics give power to the nervous system to generate or secrete the nervous influence, by which the whole frame is strengthened." This view is endorsed by Dr. Headland, with the additional idea that there can be no "permanent alteration in the nervous system without a primary impression on the blood." He then maintains that quinine differs from neurotics in this, that while they are rapid in their effects, the tonics are slow; while the neurotics are transient, the tonics are permanent. Neurotics show their action promptly on the healthy, as well as the diseased; whereas the action of the tonics is scarcely perceptible on the healthy. Neurotics do their duty when applied exter-

nally by mere contact with the nerves; tonics do not. Thus, "tonics differ in each particular of their action, from those remedies which influence the nerves directly." The author then asserts that the various diseases in which quinia has been found useful, are blood diseases; and the net purport and upshot of this section of the work is, that quinia supplies some material wanting in the blood, and thus comes clearly under the head of that class of medicines which supply a want, and remain in the blood—restoratives.

But there is another class of tonics different in action from these, whose duty it is to break down morbid processes, and are then eliminated from the system. They are called Catalytics. They are employed also in blood diseases, but being unnatural to it, must be and are excreted. Mercury in syphilis, iodine in scrofula, arsenic in lepra, are examples.

Neurotics constitute the next important class of medicinal agents. They are divided into stimulants, narcotics, and sedatives. They pass through the blood, produce no change in it, act upon the nerves by direct contact, and are eliminated. The modus operandi of this class is much more obscure than of the hæmatics. "Hæmatics control diseases; neurotics counteract symptoms." Not satisfied, however, with what they *do*, Dr. H. endeavors to dissipate the mist which surrounds us, by guessing as to *how* they do it. Then comes the old story over again, of atomic structure—definite compound atoms of nerve and nerve medicines, and the possibility of an atom stimulant coming in contact with, and fitting into the sensative surface of nerve, thus bringing out high action; and an atom sedative arranging itself alongside of an unduly excited nerve, and hushing up its cry. This is all modestly put, however, and claims to be only speculation. His points of moment are, that the neurotics pass into the blood; that they effect change in nervous function; that they are transitory in action, and pass away from the blood.

All those medicines which exalt nervous force are called stimulants. A very proper caution is entered not to "confound nervous force with vital force;" and he adds that "when there is a failure in vital energy, no stimulant will serve to prolong life, for it can not communicate fresh vital power. But there may be no such failure of vital energy, and yet a sudden or

accidental deficiency of nervous force, may serve to peril the continuance of health, or even the tenure of life."

When there is a depression of vital energy, the tonics, which are blood medicines, are the remedies to be relied on.

Narcotics "first exalt the nervous force, and then depress it; and have also a special action on the intellectual part of the brain." "This depression is not in a direct, but in an inverse ratio to the primary stimulations." "Narcotics in a poisonous dose, cause insensibility, gradual suspension of the respiration, and death. Sedatives do not cause death by coma, but by syncope, or suspended action of the heart." They are divided into three orders: inebriants, soporifics, and deliriants; of the first, alcohol is the type; of the second, opium; and this is "by far the best remedy for pain in the whole catalogue of medicines." "The relief of pain and the production of sleep, are among the commonest and most obvious of the offices which fall to the lot of the physician, and in either case, opium, or one of its preparations, may be said to be indispensable." Yes, yes, this is the stay, the prop, the anchor, the pillar of cloud by day. This is indeed the Hamlet, which can not by any manner of means be left out of the play.

Sedatives constitute the third order of neurotics. "They directly depress nervous force; they are energetic and dangerous agents; exert little or no effect on the mind; their depression is not preceded by stimulation; they act on the organic functions of the brain, and in poisonous doses they kill by syncope."

Among the sedatives Dr. H. places the universal beverages, tea and coffee. They relieve congestion of the brain, and thus clear and tranquilize the action of the mind. Something of this character he regards as a necessity of life in all civilized states, owing to the mental energy which is the result of contact between mind and mind. It is of service in removing congestion of the brain consequent upon the use of opium. It may have some faults—but, "with all its faults we love it still."

A good deal has been said of late about the growing disuse of the lancet. Certainly, if the only object of venesection is to lessen the volume of the circulation, the lancet can not be discarded. There are perhaps some conditions in which it

has no proper substitute, but as a general thing the sedatives have taken its place. "They all exert an influence over the respiration, circulation, and digestion, lungs, heart, and stomach. The violent action of the heart is allayed in high fever. They are of signal efficacy in pneumonia;" indeed in almost all the forms of disease in which twenty years ago the lancet was promptly resorted to, this class of medicines is now called into requisition, with entire satisfaction to patient and physician.

For want of space we pass by the chapter on astringents.

Next in order, Dr. Headland takes up the eliminatives. They are a class of medicines whose peculiar field of action is the glandular system. Having been absorbed into the general circulation, they pass out through the glands, stimulating them to an increased secretion. These eliminatives are genuine eclectics, each one selecting for itself the particular glands through whose portals it designs making its exit from the system. Their province is to increase the glandular secretion, and they march with unerring certainty to that part of the field of action whose forces need stimulation in order to the rescue of the citadel.

Thus the mercurials take up their line of march for the liver, the diuretics for the kidneys, the expectorants for the breathing apparatus; the diaphoretics engage in skirmishes upon the outskirts, and leave the empire for which they fight all in a sweat, while the cathartics are launched upon that great highway of commerce which has been the scene of so many and such terrible conflicts.

The eliminatives do not "exert a blood influence, nor do they act on the nervous functions, but they operate on those obscure vital forces by which secretion is directed and controlled. They are used to restore the functions of a gland when impaired; they may eliminate a poison or morbid material, and thus resolve disease; they may be of service by draining away from the blood fluid and solid matters. The first result of action upon a gland is an increase of its proper secretion. This action pushed to a further extent, may cause the excretion of some of the natural constituents of the blood. Thus it is that all eliminatives are more or less anti-phlogistic. Their influence when carried to excess, is similar to bloodletting," etc., etc.

The concluding pages of the book are devoted to an illustration of some of the general principles of the action of medicines which have been laid down, showing in what manner they are applicable to special cases. We shall notice but two or three.

Cod-Liver Oil.—This is a weapon of the armory, by which many people swear; the doctors swear that it *will*, and the patient swears that it *does*. Its use is traceable a good way back, but "to Dr. J. H. Bennett belongs the high honor of having clearly pointed out its use in tubercular diseases, in 1841." "It is thought to exert a specific action in the cure of pulmonary phthisis, and it certainly appears to be the only medicine that possesses any marked or peculiar power over the progress of this disorder. It does not appear that any other oils are equally effective."

That the oils have been productive of great good in the treatment of phthisis, and scrofula in its various forms, there seems no room to doubt. The history of practical medicine in the last twenty years, is replete with the details of their marvellous virtue. From Great Britain, from France, from the whole of continental Europe, from the islands wherever commerce has carried intelligence, from Liberia, where colonization has built an empire, from all the earth wherever civilization is at all advanced, we have the record of enlightened and conscientious men, in attestation of their power to modify the mortality from that terrible and heretofore uncontrollable scourge. Assuming, then, that the results are as claimed, the question has occurred, can it be possible that for this extraordinary demand there has been a supply really of cod-liver oil. If not of cod oil, and the results still obtained, may it not be true that some other oils are as valuable as this? But what other oils have been found to possess *peculiar* properties adapting them to the treatment of phthisis and scrofula? None, so far as we know. Then may it not be true that the success of the treatment has been due to some properties belonging to the oils? If so, what is the oil containing the greatest advantages of acceptability to the palate and cheapness to the purchaser, and purity, on account of cheapness? Following this line of reasoning, we determined, in the summer of 1854, to substitute the fresh linseed oil, for the more

offensive and costly cod liver. Carrying along with it the traditional idea, which has recently been combatted with a good degree of force by Dr. Bell, of New York, that alcoholic liquors had been largely instrumental in the arrest and cure of these same disorders, we combined the two, and in all the forms in which those maladies have presented themselves to us since that date, this oil and whisky has been our chief reliance. To say that we are perfectly satisfied with the results, would be saying that phthisic and scrofula are robbed of their terrors. This is not by any means true—but this is true, that in a reasonable experience of five or six years the results are so encouraging that we have no disposition whatever to fall back upon the more offensive and very expensive article which is said to be obtained from the liver of the cod-fish. Which is *said to be;* for we have no assurance whatever that the many preparations for which we pay a dollar a bottle, are cod oils—all we do know is that they have a fishy smell.

In the use of the linseed oil and whisky, we are in the habit of ordering a teaspoonful of each, three times a day, and as the stomach becomes accustomed to it, increasing the quantity to a tablespoonful. When they are put in the same bottle and shaken up thoroughly before use, the taste of the oil is in a great measure covered up by the spirit, and is very rarely offensive even to delicate stomachs.

If asked for a theory in regard to their action, we should say, frankly, we have none. Start off on whatever train of speculation we may, we find ourselves returning pretty promptly to the commonplace idea of nutrition. The spirit by its stimulation, perhaps, the better enabling the digestive apparatus to manage the oil.

Whatever may be the modus operandi, the effects have been in many cases as decided as they were unexpected, until they have ceased to be unexpected, and we have learned to look for them with a feeling which is perhaps best expressed by the phrase, strong hope; and yet if expectation were the word, it would not often be unrealized. It would be mere repetition to go over the words cough, expectoration, hectic, emaciation, night sweats; but all these things have we seen pass away under the use of the oil and whisky, and a few months have brought up the patient to normal weight, normal appearance, and normal sensation.

It it not designed to claim for the linseed oil any medicinal advantages over the cod liver; but if it is more certainly pure, if it is cheaper, if it is less offensive, and accomplishes what is claimed for the fish oil, it certainly commends itself as a boon to poverty, and to sensitive stomachs, and as such we commend it to the profession.

We had marked for comment, several other articles, and among them chloroform, and opium; two hobbies which some of us are in the habit of riding rather unsparingly, claiming, on account of the extraordinary speed of the one, and the bottom of the other, that they can never be beaten. We confess to a jaunt upon each, every now and then. When we ride the first, however, we use a stiff bit and a tight rein; when the second, we prefer a snaffle, and a pair of spurs.* S.

SURGERY OF CHILDHOOD.

Our attention has been directed to a series of lectures in the British Medical Journal, three in number, bearing the above heading, recently delivered at the London Hospital for sick children, by Athol A. Johnson, Esq., surgeon to that institution. The subject is a novel one, for although treatises upon *diseases of children* abound, yet nowhere, we believe, has the "surgery of childhood" received any special attention. For this reason, if for no other, the lectures of Mr. Johnson are peculiarly valuable. In addition to this recommendation, they evince, so far as they go, a careful observation in the ample field of study which the lecturer enjoys. We regret that the series was not more extended, inasmuch as but a small part of this interesting department is embraced, and we hope that the author will fulfill his partial promise of enlarging and completing the work he has so well begun.

We believe that a brief notice of these valuable lectures will be very acceptable to our readers. Mr. Johnson arranges his subject under three heads—1st, Congenital Malformations; 2nd, Injuries and Accidents; 3rd, Surgical Diseases.

Congenital Malformations.—This comprises the first and a part of the second lecture, and although some very important subjects are omitted or barely noticed, yet of many interesting and important deformities a full and satisfactory account is given.

* This work is from the press of Lindsay & Blakiston, Philadelphia, 1859.

Imperforate Anus is treated of pretty freely. In those cases where there is no evidence of a pervious condition of the lower part of the rectum, and where the only remedy consists in the formation of an *artificial anus*, he is rather inclined to give the preference to Littre's operation, viz., opening the large intestines in the left groin rather than in the loin. In confirmation of this view he refers to M. Rochard's report of five cases where this operation had been permanently successful. In one case, a female, the operation was performed in 1813, and the patient is still living. "Her digestion is excellent, the stools are solid, passed periodically, and to a certain degree under the control of the will." The woman is strong and able to work. In another case the woman has borne four children, the pregnancies and labors being normal.

Hare-Lip.—Here he is decidedly in favor of an early operation, during the first week, or at the latest during the first three months. In this opinion we fully concur, having several times performed this important little operation between the third and sixth week with the most gratifying results. In fact we know of no reason why it should be deferred, and there are certainly many in favor of its early performance. We thus enable the infant to take its nourishment readily, avoid the deformity which results from long delay, and relieve the mother from a great and ever-present source of mental disquietude. The only unpleasant result of an early operation which we have ever witnessed, was in the case of a child four weeks old, where, just as the operation was completed, a pretty severe convulsion occurred; but it lasted but a few moments, and the child made a good recovery without any recurrence of convulsions.

Orthopædic Surgery is only alluded to to say that in childhood deformities are more easily remedied by suitable mechanical contrivances, than when in adult life the parts are fully developed and less yielding.

Encephalocele and Spinæ Bifidæ.—Upon these topics the lecturer is pretty full, and his remarks are valuable. Of the first he says:

But my principal object in alluding to them is, to warn you to be upon your guard in meddling surgically with such congenital tumors in the situations I have mentioned, or else you

may be disagreeably surprised by finding that you are unintentionally extirpating a part of your patient's brains—a mistake which very able surgeons confess to having committed. M. Lallemand, for instace, relates that he was asked to see a young girl with a tumor situated in the occipital region. Taking it for a wen, he began to remove it; but he soon found out that he had to do with the dura mater, which was protruding through a hole in the occipital bone. The child died, of course, a few days afterward, when the tumor was found to contain an elongated portion of the cerebellum. In the third volume of the *Clinique des Hopitaux des Enfants*, you will find related a case of encephalocele in the forehead in a child eight years of age, (said, however, to be probably not congenital), which was mistaken at first for an abscess, and punctured; this was followed by head symptoms, when the case was pronounced to be fungus of the dura mater. More incisions were made, and the surgeon tried to cut off the whole tumor; but the operation could not be completed, on account of the hemorrhage, and the child died. On examination, the tumor was found to be composed of the substance of the brain itself protruding through the dura mater, which was perforated (it had been, we may recollect, extensively wounded), and corresponding to the loss of substance of the bony case of the skull. Dr. Zdzienski, too, relates an interesting case of this kind occurring in the nasal region, where the *ecraseur* was applied in 1857, the affection being mistaken for a vascular tumor. The patient, who was between eleven and twelve years of age, of course died. [*Encephaloceles Congenitæ Casus Rarior.* Auctor, Theophilus Zdzienski. 1857.]

The practical point for us to bear in mind is, to recognise these tumors, to be aware of their nature, in order that we may avoid meddling with them unnecessarily, especially as their existence is not necessarily in all cases a cause of death. M. Lallemand, for instance, found a hernia of the cerebellum in an aged woman at Salpetriere; and in Dr. Zdzienski's case, already quoted, the patient at the time of operation was about twelve years of age, and in good health. The leading diagnostic marks are—1st, the seat of the congenital swelling; 2nd, its *pediculated* character; and 3rd, its *color*, which varies according to the position, being natural in the occipital region, where it is covered by the hairy scalp; while in front, where the skin is thinner, it may present a reddish or violet hue, giving it a great resemblance to an erectile tumor. It is generally soft and fluctuating; usually, but not invariably, reducible to a certain extent; while pulsatory movements synchronous with the pulse, as well as with the respiration, are sometimes present, but are very often absent.

The treatment must be principally negative. You must not *excise* the tumor, nor yet *incise* it. Moderate pressure with steady support will generally be of service. If there is great tension, you may perhaps evacuate some of the fluid by acupuncture; but injections, whether of iodine or of other substances, are, on the whole, more likely to do harm than good.

In speaking of *spinæ bifidæ*, he presses the importance of avoiding all attempts at removal of the tumor by knife, suture or ligature. Such operations always fail. Sir A. Cooper cured two cases, one by simple compression, the other by evacuating the fluid with a needle and by subsequent compression. Mr. Johnson thinks it probable, as in both cases the tumor was of moderate size, that it did not contain any portion of the cord. As is well known, this disease is not very amenable to surgery, few cases having been successfully treated. Of late iodine injections have been advocated, and not a little is claimed for this practice. Reference is made to seven cases treated in this manner by Dr. Brainard, of Chicago, five of which were successful, although one of the five died afterwards of chronic hydrocephalus. The author sums up the matter as follows:

1. The chances of a favorable result are never very great; and in the worst cases, where the tumor is very much distended and the deficiency of the spinal walls very considerable, where the skin is thinned, and, as it were, unravelled or on the point of bursting, or having actually burst, there is no reasonable hope.
2. Under any circumstances, the strong probability of the presence of a part of the cord or its nerves, and the fatal results of the cases in which such attempts have been made, forbid our having recourse to ligature or to excision.
3. In some cases, especially in those where the vertebral fissure is small, the tumor pediculated, and the communication with the spine limited, there is a chance of a natural cure taking place, or, at any rate, of the tumor not proving incompatible with life, if it is simply protected from external violence.
4. In treating this affection, if the tumor is of moderate size, and not enlarging, I should be unwilling, at first, to do more than apply gentle compression, by means probably of collodion, combined or not with astringents, support the part well, and protect it effectually from injury.
5. Should the tumor show a disposition to increase, I might then make a fair trial of iodine injections, though with a certain amount of foreboding as to the occurrence of inflamma-

tion of the spinal membranes. The punctures for this purpose should be made at a part where the skin is healthy and at the side of the tumour; for it is generally at the middle line that the cord and its nerves, if present, are attached. The strength of the solution, which should have been recently prepared, should be about one-sixteenth of a grain of iodine, and one-eighth of a grain of iodide of potassium to the dram of water; the quantity, at first very small, not more, perhaps, than eight or ten drops, which might be introduced by means of the instrument now in use for injecting the perchloride of iron in cases of nævus. After the injection, pressure upon the tumor should be avoided, and if any redness or heat come on, cooling lotions may be used and collodion applied, after the inflammatory symptoms have subsided. Fresh injections should not be had recourse to, so long as any signs of inflammation remain, or till the tumor ceases to contract.

A few other malformations are briefly noticed, while others are entirely omitted. Nævi and erectile tumors, perhaps the most frequent of all congenital deformities, are not embraced.

Under the second head, "Injuries and Accidents," he devotes the most of his time to fractures. A good reason for this is assigned, when he says that, "At this hospital we do not profess to treat accidents."

The third head, "Surgical Diseases," is devoted to the consideration of hernia and diseases of bones and joints. After reviewing certain statistics showing the relative frequency of hernia in childhood, he makes the following judicious remarks as applicable to the disease as a whole without reference to its various forms:

1. With regard to the contents of the sac. These are generally *intestinal*, for the omentum in infancy is short and imperfectly developed, seldom reaching much below the navel. The large intestine too, especially the sigmoid flexure, at this time of life, is comparatively moveable, and hence there would be, perhaps, a greater chance of finding this present when the sac is opened.

2. It is in early life especially that a radical cure of hernia may be hoped for and confidently expected, if methodical pressure is steadily maintained for a certain period. In umbilical and congenital inguinal hernia there is a strong natural tendency of the openings to contract; and if we only prevent the protrusion of the bowel, we may calculate, almost with certainty, on obliteration taking place, on the abnormal channel becoming blocked up. Even in the non-congenital form

of inguinal hernia a permanent cure will, in all probability, be effected, for in very early life the development of the pelvis is rapidly inducing changes in the inguinal canal which becomes more and more oblique; the intestines and other abdominal organs are enlarging, and consequently less prone to protrude, and the dilated opening tends to contract, if no unnatural distension of it be permitted, in obedience to the general law by which hollow parts adapt themselves to their contents.

3. In our treatment, we must bear in mind not merely that early attention implies a permanent cure, but also that ruptures in infants, if allowed to remain unreduced, are by no means unattended with danger. Incarceration and strangulation may take place at any age; and though they may be relieved without the use of the knife with comparative frequency in early life, yet, if reduction cannot be effected, the subsequent ill-consequences advance with much rapidity, and no time should be lost in having recourse to operation. Mr. Fergusson has been called on to operate on an infant seventeen days old; and Mr. Erichsen in two, under the age of six weeks. At St. George's Hospital, within the last seven years, there have been, in addition to the case of femoral hernia already alluded to, four of inguinal hernia, requiring operation, in children varying in age from eleven weeks to fourteen months; of these, one was *oblique*, the other three *congenital*.

4. The truss to be worn need not, of course, be of anything like the strength required in the adult, but it may be employed, with certain modifications to be alluded to hereafter, with perfect safety in the youngest child, and the sooner its use is commenced, the less the danger of the patient, the greater the chance of his permanent relief. Considerable care, however, is required in the management of the truss; for, in consequence of the rapid alterations taking place in the size of the patient, the truss which at first fits well may soon prove useless, and the cure be making no progress, the patient's life really endangered. I have said nothing of the operation for the radical cure of hernia in children, because, without denying that it may in some cases be called for, I cannot but think that we are seldom justified in having recourse to an operation, by no means absolutely unattended with danger, to effect that which can usually be accomplished without the slightest risk. In the adult, of course, the conditions are different, the chance of cure by compression alone being in their case comparatively small. I may mention that a child has been brought to me on whom the operation had been performed and *failed*, the hernia having been reproduced.

The different varieties of hernia are then considered. Umbilical is spoken of as the "most characteristic of early life."

The reason is obvious. Although this form of hernia is sometimes congenital, yet in our experience the large proportion of cases have occurred during the early months of infancy. During this period, while the opening through which the umbilical vessels passes is still loose and unconsolidated, the violent paroxysms of crying, to which some infants are subject, not unfrequently induce the disease. The opening is larger in some children than in others, and there is a manifest difference in the time required for its complete consolidation. In one family which we attended three infants in succession were the subjects of umbilical hernia. In none of them was the disease congenital, but in all it occurred during the first six months after birth. These cases were readily cured by a compress of cork held in place by a broad, adhesive strap. The great point in the treatment is the *constant* retention of the bowels, for although spontaneous cures may and do occur, still there is no inconsiderable risk, if neglected, that the disease will become permanent. Mr. Johnson recommends a pad inserted in a broad band of elastic material made so as to lace behind.

Inguinal hernia of the common oblique form, not congenital, may occur, says the author, in very early life. But this is rare. The large proportion of cases are congenital, "though in truth this term is not strictly correct, as the rupture may not actually occur till a very considerable period after birth." There is nothing new or of special interest in the account given of the treatment of this form. Complete and constant retention by a well-fitting truss makes up the treatment.

Diseases of Bones and Joints.—The author barely adverts to this, which he terms "our great *cheval de bataille*," to warn against hasty operative procedures.

It is in children especially that a cure may be hoped for, even in most aggravated forms of disease of these parts; for in children the plastic powers of nature are so great that recovery may take place when in the adult any such hope can scarcely exist. I have no hesitation in owning that, when I first became surgeon to this hospital (not so many years since), I was less unwilling to have recourse to operations than I am now. In recent times, what is called conservative surgery has made such progress, that a joint is now excised, where, formerly, the extremity would have been sacrificed. This is, no doubt, a great improvement, but after all, the most really con-

servative surgery is, *to save the joint as well;* and this, I feel perfectly certain can, in early life, with care, time, and perseverance on the part of the surgeon, be accomplished much more frequently than is generally supposed. I need scarcely dwell on the advantages of this preservation, if it be practicable; to say nothing of our avoiding the risk of an operation, which is always appreciable, and in the knee is considerable even in children, the length and proportions of the limbs are preserved, and a considerable amount of motion in the joint may ultimately, in almost all cases, be obtained.

We have thus briefly noticed the leading points in these three lectures, and it will be seen that the "surgery of childhood" is but opened. That the subject is an important one, no one can doubt, and we see no reason why it is not as deserving of a separate consideration as the diseases of children. Every surgeon has been impressed again and again with the fact that childhood exercises important influences not merely upon the character of surgical diseases, but upon their treatment. An illustration of this has occurred to us recently. Hydrocele, although essentially the same disease at all periods of life, is amenable to very different modes of treatment in childhood from those required in the adult. During the past winter we have treated two cases, one a boy six years old, the other case was two years older. In the first case the disease had existed for three years, the tumor was large and translucent except at the site of the testis. The tincture of iodine applied externally for about eight weeks, with occasional interruptions when the skin became irritable, with such compression and support as a well-fitting bag truss afforded, effected a complete cure. In the boy eight years of age this mode of treatment failed. After a fair trial we decided to puncture the sac. This was followed by pretty sharp inflammation which subsided in a few days and resulted in a cure. In an adult, as every one knows, such means would be of no avail. Either a stimulant injection, or seton, or some other active procedure would be necessary to produce the change required in the tunica vaginalis. Ample illustration might be adduced to show that the "surgery of childhood" is as well entitled to a separate consideration as its medicine. P.

The Subjective and Objective Influences of Medicine. An address introductory to the regular course at Shelby Medical College, Nashville, for the session of 1859–60. *By* E. B. HASKINS, M.D., *Professor of the Principles and Practice of Medicine. Nashville, Tenn.*, 1859.

In the midst of the general tendency to skepticism as to the remedial power and value of medical science that prevails at the present time, it is quite refreshing to peruse an address like the one before us, full of unwavering faith and the strictest professional loyalty. This address presents to us in a clear, fluent and graceful style, the healthful and elevating influences exerted by the medical profession upon the intellectual and moral faculties of its votaries, and its inestimable services to the world in lives saved, in shortening the duration of disease, in postponing death in incurable maladies, in the alleviation of pain, in assuaging mental disquietude, and in preventing diseases both by hygienic and prophylactic means. The author is evidently a clear, vigorous thinker, an elegant writer, and an enthusiastic devotee of our noble profession.

Valedictory Address to the Anatomical Class of the Philadelphia School of Anatomy. By D. HAYES AGNEW, M.D.

There is a familiar classification of all mundane entities, according to which every thing is said to be either *good*, *bad*, or *indifferent*. But the best of rules it is well known, are subject to exceptions, and the production whose title is at the head of our article, seems to be one of them. It is not GOOD Anatomy, in the first place. The Dr.'s rare accomplishments at personification, have, it is true, furnished him with a subject; but it is not dissected, there is no analysis, the demonstration is all rodomontade and declamation. And what a subject for an anatomist's table! In one view of it, it is so stale, corrupt, and offensive, that all the anti-septics of the "Philadelphia School of Anatomy," could not make it fit for a decent dissecting room—the very national nuisance of the day—and in another aspect so vivid, sensitive, excitable, that the slightest touch of the scalpel would exhibit a revolting vivisection; so lively, indeed, that Dr. Agnew, after accusing it of many mischievous doings, very uncommon for a corpse,

represents it as vocal with all kinds of impertinence and blasphemy. It is not good Anatomy to meddle with such a thing, in any view of it. The Doctor had better let it go into decomposition, if it be so disposed, or prepare it for quiet dissection by a dose of his own medicine, if it be still alive.

Nor is it good rhetoric. Valedictory oratory should not be controversial, much less denunciatory. The writer's sentiments were evidently assuming the proper tone for his exercise, when he "cast a glance over the seats, and *discovered* many *faces absent*, which had grown familiar," etc., and there is no knowing what heights or lengths of the pathetic, this extraordinary *discovery* might have inspired. But the idea of desertion—the reflection that any, who had once enjoyed the privileges of the Philadelphia School of Anatomy, could be so recreant as to abandon them—seems to have transformed regret into amazement, and absolutely compromised the scholarship as well as the temper of the parting discourse. An "*opinion* wreaking with the blood of violence," is a very sanguinary onslaught upon our discrimination between persons and things. A "single passage" in the Bible, either expressed or implied, is an implication quite too subtile for common apprehension; and it would require a professor of metaphysical anatomy of rare accomplishments, we judge, to demonstrate the "elements of intuitive truth," since if there be any thing in nature simple and uncompounded, it is that same and indefeasible monitor and guide of humanity, intuitive truth. If the professor be really ambitious of good rhetoric, let us advise him to a re-perusal of his Blair, preceded by a glance or two at a certain familiar little volume, sometime ago made and provided for such cases, by one Lindley Murray.

Nor is our valedictory, in the second place, BAD; not bad as a manifesto of Philadelphia claims to pre-eminence in medical teaching; claims, which are disputed only when unwisely vaunted. Not BAD, as a bait for Southern students, although a skillful angler might have adjusted it so as to cover the hook rather better. Not BAD, certainly, in its views of national union and confederate fraternity, which it will do little to promote by its unseasonable advocacy.

And, moreover, it is by no means INDIFFERENT, considering the species to which it belongs. On the contrary, it is quite

respectable as a kind of medical salmagundi, or a contribution to the sensation pamphleteerism of the day, or a secular "tract for the times." Bonner would cheerfully give it a place in columns that have been graced by the productions of Everett, and Dr. Smith's *Medical World*, if it were still in existence, would delight to receive it into the department of its varieties.

Badinage and raillery, however, all aside, we have two serious objections to the address we are noticing. First, that it introduces to the scientific lecture-room topics which are as alien to the legitimate engagements of the place, as they are to those of the churches and pulpits which have been desecrated by them in some parts of the country for the last few years. *Niggerism* belongs only in the conventicles of fanatical abolitionists, or the banqueting halls of equally fanatical fire-eaters. Everywhere else, whatever aspect of it is presented, it is an intolerable intruder and nuisance; and the very last degree of incongruity and impropriety is reached, when its bitter and distracting controversies have found their way into the serene domains of science.

With no less earnestness, do we object to Dr. Agnew's valedictory, for its treatment of that ill-advised movement of some of the medical students, which the Dr. regards as the most remarkable event of the season, and which it was evidently the leading purpose of the valedictory to discuss in such a way as to make capital for somebody. Regarded as a freak of some excited young men, originating in their own mistaken impulses, that movement has received far more consideration than it deserves. It should be set down to the account of youthful indiscretions, and, like any other items in the same category, be only disapproved, and—forgotten. None will invoke this oblivion more heartily than the young gentlemen themselves, when a few months of sober reflection shall have revealed to them the absurdity of forsaking their chosen professional instructors in Philadelphia, because John Brown had been acting the felon at Harper's Ferry. But, if on the contrary, the proceeding was advised and instigated by older heads—if a factitious discontent was artfully evolved from the natural resentment excited in these students by the impertinence and fanaticism of the abolitionists, and sinister influences were

employed to divert them from the peaceful pursuits to which they had devoted themselves, into an unbecoming participation in sectional politics, or if—which would be worse still—the officers of Southern schools, taking advantage of a temporary exasperation of Southern feeling, either originated or encouraged a movement so discourteous to their Philadelphia brethren, and so unworthy of fair and generous competition, then, we submit, none too much consideration has been bestowed on it. It deserves all the consideration, and the kind of consideration which wise and honorable men are disposed to bestow upon intrigue and craft, in whatever form and with whatever features they appear. Let us not be understood to advise the further discussion or agitation of this subject, by medical men, anywhere, or anyhow. No, indeed. Let by-gones be by-gones. It has been intimated, in some quarters, that the Philadelphia exodus may be brought to the notice of the American Medical Association, at its next meeting. We hope not. That association has held its meetings, now, for many years, successively, in all the different sections of the country, and a most harmonious and fraternal spirit has pervaded every assembly, and inspired all their proceedings. To the honor of the medical men of the nation, their convocations have never been disturbed by sectional questions or prejudices, which have vexed and sundered almost every other organization of similar geographical extent, in the land. Let us continue to realize and exhibit this honorable and felicitous distinction. Especially, let us put far from us that politico-economical question whose discussion is the besetting sin of the times. "Down, busy devil, down, down,"—down, if you please, to the degenerate assemblies at Washington, already too familiar with your impship; but come not up into the better society of our medical congress.

The abstracts from American Medical Literature in this journal, will be under the direction of Dr. E. D. Foree. We are glad to have it in our power to entrust this department to such able management.

Editorial Department.

We are indebted to Messrs. Blanchard & Lea, for copies of the following valuable works, just issued from their press: Stille's Therapeutics, 2 volumes, octavo; Hamilton, on Fractures; and Clinical Lectures on Certain Acute Diseases, by Robert Bentley Todd, each 1 volume. Extended reviews of each of these works will appear in our next issue.

The proceedings of the College of Physicians and Surgeons have been crowded out of this number, although some cases of much interest have been presented before that Society; they shall, however, appear in our next.

A correspondent requests us to offer one dollar each for a copy of the American Journal of Medical Sciences, for July, 1856, one for October, 1856, and one for January, 1857. They may be sent to this office.

Some of our exchanges have advised that quackery be met on its own chosen battle-field, and fought with its own weapons. We are not quite strong enough in our faith in the propriety of this course, to venture upon a contest under any mongrel colors, but we do most honestly believe, that every effort to render legitimate and known remedies palatable and popularly acceptable, should be countenanced as directly promotive of the interests and good favor of the regular physician.

Under this belief we think it our duty as journalists, to bring to the knowledge of our readers, all improvements in pharmacy having for their end the removal or concealment of the nauseous properties of drugs, provided these improvements are altogether free from the concealments and reservations of nostrums. We are then enabled in this number to mention that Messrs. Wilson & Peter, of this city, offer the profession a new "Worm Lozenge." This is prepared of pure santonine, thoroughly intermixed with confection, each lozenge containing $\frac{1}{6}$ of a grain of santonine, with an adequate quantity of confection.

We regret to be obliged to record the death of an estimable lady, a resident of this city, from chloroform unadvisedly and incautiously inhaled. It seems that she had been in the habit of resorting to chloroform without professional sanction, in attacks of headache, from which she habitually suffered. On the day of her death she had repaired to a retired chamber, and had requested the family not to permit her to be disturbed. Some five or six hours after this, she was found lying upon her side, with the handkerchief which had been imbued with chloroform still pressed to her face. The vial from which it had been poured, was found upon the bed, but afforded no certain clue to the amount she had taken, though it was inferred that three ounces had been used. The body presented unusual cadaveric rigidity, pupils contracted, and fingers rigidly semi-flexed. Death seems to have occurred without struggle or convulsive tendency.

The lady was probably within a fortnight of her delivery, but it was the opinion of two of our most respectable practitioners, who were present, that the time had long elapsed when any hope was left of saving the fœtus by gastrotomy. No post-mortem was obtained.

This case should remind physicians of the importance of restricting the inhalation of chloroform to their own personal observation. Patients, even the most circumspect, and acting under the most stringent advice in reference to rules for its self-administration, are not competent judges of the degree of its influence upon themselves, and it is a well-admitted fact, that at a certain period of its influence, patients are apt to press the impregnated sponge or handkerchief closer to their nostrils. Within the last few months we have not only been obliged to forbid this *family* use of chloroform to one of our most intelligent patients, but by way of additional precaution, have placed the other members of the household as spies upon the conduct of our patient, lest she might at some period of intense suffering neglect our injunctions, and yield to the almost irresistible temptation of relief offered by this delicious anæsthetic to the pain-tortured nerve.

There are some physicians, too, who may profit by this unfortunate occurrence, and learn to be more cautious in their manner of speaking of this agent, for if we were to judge by

their manner, the inference would seem deducible, that they thought it could not produce death at all; that it was a harmless agent, and might be inhaled ad libitum.

University of Louisville.—The twenty-third session of the Medical Department of the University of Louisville has just closed. The commencement exercises were held in the hall of the University. A brief, but eloquent address was given by Hon. James Guthrie, President of the Board of Trustees. Prof. J. Lawrence Smith delivered the valedictory, which was marked by good taste, sterling sense, and lively witticisms. The Trustees, Faculty and Graduates next assembled in the capacious museum, where a most *recherche* supper was steaming forth its savory invitations, and soon wit and humor, speech and anecdote, pun and repartee, asserted their supremacy, and the staid robes of the professorial chairs were laid aside and just tribute paid to the god of mirth. Hon. Mr. Guthrie, His Honor the Mayor, Judge Bullock, Mr. Barbee, and others, were heard from with keen appreciation.

Altogether, the session has been one of more than ordinary interest to the friends of the University, for many years have passed since as large a class assembled within its walls, and never did a more decorous, gentlemanly and attentive class assemble anywhere.

From the beginning until the close, the bonds of union between the teachers and the taught seemed to strengthen and increase, and we will look anxiously for the return of those whom it was our pleasure then to meet for the first time. Such as we are not to meet again, carry with them our warm wishes for their welfare and happiness.

The Diploma of the University was awarded to the following gentlemen:

W. W. Stewart, L. L. Ferguson, T. H. Hoskins, B. F. Owen, W. H. Way, J. T. Ladd, T. B. Shelby, W. R. Hathway, G. W. Sacry, J. A. Morgan, J. H. H. Mills, A. A. Wheat, J. C. Ashford, G. W. McLoed, J. M. Young, J. B. Evans, R. H. Smith, G. C. McCarty, W. E. Nash, C. A. Cox, F. Martin, D. Johnston, J. N. Clemens, B. C. Hubbard, J. Hall, Kentucky; T. J. Ryan, W. D. Thomas, W. R. Van Hook, W. N. McCoy, R. C. Irwin, T. J. Johnson, A. W. Bare, Indiana; J. L. Price, Mo.; R. M. West, J. C. Terry, Tennessee; J. L. Griffin, Arkansas; W. F. Luckett, Virginia; W. Johnson, Georgia; P. M. Johnson, Texas; N. W. Brown, Mexico; O. F. Renick, Kansas.

MONTHLY MEDICAL NEWS.

VOL. II. LOUISVILLE, KY., APRIL, 1860. NO. 4.

LECTURE ON THE SPINAL OR ACCESSORY NERVE OF WILLIS.

BY CLAUDE BERNARD.

Translated for the Louisville Monthly Medical News, by JAMES S. MOREL, M.D., Savannah, Georgia.

SUMMARY:—*Spinal Nerve—Its Physiological History—Galien—Willis—Scarpa—Chas. Bell—Bischoff—Anatomy of the Spinal Nerve in Man and Animals—Properties of the Spinal.*

GENTLEMEN: I have often told you that the anatomical distribution of a nerve being known, the physiological experimental method which is employed to ascertain its uses, consists in dividing it by section. The nerve separated in this way from the brain or spinal marrow, no longer displays its influence on the part of the body in which its branches ramify. The phenomena which were effected by them, are no longer produced, and by ascertaining their absence, the function belonging to a nervous cord is negatively established.

If the functions of the spinal have for a long time remained doubtful, it is simply because this nerve is not so easily reached as some others are by the experimental method. The idea of destroying its numerous origins, and of reaching them in the curious course which they pursue in the rachidian canal, appears at the first glance almost impossible. The experiment has nevertheless been very recently tried, and successfully performed. But the formidable mutilations which attended the operation, always rapidly hastened the death of the animals, and the experimentalists have, from this fact, been able to found their opinions upon phenomena of but

short duration; consequently they have been very imperfect.

The results obtained under such unfavorable circumstances have not appeared to me, as well as to many other physiologists, sufficiently conclusive; and the fault can only be attributed to the experimental process itself; for the subject had been studied with much care by gentlemen of extensive information. Formerly I undertook researches on this subject, thinking that if a means could be discovered of preserving the lives of the animals, and at the same time insure the destruction of all the origins of the spinal nerve, this problem would be solved. After long and repeated trials, I have at last succeeded in doing what had never been done before by my predecessors, viz: observing and investigating for a long time, the disturbances induced on the functions of animals, from which I had completely taken away the spinal or accessory nerve of Willis. I have consequently been able to present new facts, that will be found, I hope, deduced from a mode of experiment pursued with the utmost vigor. In the expose of the works, which have been undertaken to establish the physiological function of the spinal, I will briefly pass in review the principal opinions now published on the function of this nerve. I will refer particularly to the work of M. Bischoff, and carefully discuss the doctrine prevailing at this time, according to which, an effort is made to confound the pneumogastric and the spinal nerve as the two roots of a rachidian pair of nerves. The importance of this theory, and the celebrity which it has acquired, will doubtless justify the extended developments which I will present in its examination.

I will refer you then to the anatomical and physiological researches by which I have determined the functions of the spinal, as connected with anatomy. I believe that I have been conducted to new views, which will simplify and make clear the varied and frequently confused descriptions which are given of the origin and distribution of the spinal nerve. In its physiological connection, if I insist on the process of experiment peculiar to myself, it is because that in this respect more than in any other the results depend upon the means of analysis and the experiment.

1. Willis (1664). Galien had but very imperfect ideas of the spinal; he considered this nerve as a branch of the pneumo-

gastric (6th pair of Galien). Willis first described it as a particular nerve, to which he attributed an origin and distribution distinct from that of the pneumogastric. He also assigned to these two nerves different physiological functions.

Willis pointed out the origins of the spinal in the cervical portion of the spinal marrow; he described its course ascending in the vertebral canal, and its exit from the cranium with the pneumogastric, through the posterior foramen lacerum. He insisted upon the connection presented by the spinal nerve in the posterior foramen lacerum with the pneumogastric; and he regarded this anastomosis as a physiological link between these two nerves. "It is at this point," says he, "that the vagus (or pneumogastric) may, in consequence of a close union communicate its fibres, and as a consequence, its properties, to the accessory (or spinal)."

This, then, is the way that Willis interprets the physiological union of these nerves.

According to his view, the spinal is a voluntary motor nerve, which ascends into the cranium and joins itself to the vagus, not to furnish it, but on the contrary to borrow fibres from it, and as a sequence, involuntary motor power also. Whence it results, according to Willis, that independently of its voluntary motor power which it derives from the cervical portion of the spinal marrow, the spinal possesses, by this loan of fibres from the vagus, an acquired involuntary motor faculty, which permits it to act sympathetically with the pneumogastric in certain expressions of the passions, which are exhibited in the movements of the neck and upper extremities.

Then the author supposes that it was in order to effect this important anastomosis in the posterior foramen lacerum, that the spinal, springing from the cervical spinal marrow with the voluntary nerves, was obliged to ascend to the cranium and pursue so circuitous a path. Indeed, Willis adds, *that by means of this nervous anastomosis*, the *spinal becomes the auxilliary*, or according to his expression, the *accessory of the pneumogastric.*

This expose of the theory advanced by Willis on the functions of the spinal, clearly proves, that this author admitted that the pneumogastric furnishes an anastomosis to the spinal nerve, while *Scarpa* and all modern physiologists admit on the contrary, that it is the pneumogastric which *receives an*

anastomosis from the spinal. In the second part of this work, I will prove that the description given by Willis is, to say the least, not very exact, and that if it differs from that given by Scarpa, it is only because both authors have defined the origin of the spinal nerve differently.

2 *Scarpa* (1788). Scarpa, like Willis, tried to explain the functions of the spinal, by referring to the anatomical union of this nerve with the pneumogastric; only his description was directly opposed to that given by Willis. Scarpa, under the name of *internal branch of the spinal*, described a considerable branch of that nerve sent into the trunk of the vagus, on a level with the posterior foramen lacerum; and he considered this anastomosis as a kind of motor root furnished by the cervical portion of the spinal marrow to the pneumogastric. This interpretation, which was received by Sæmmering, Arnold, etc., was supported at a later date with developments by Bischoff.

As a physiological doctrine, Scarpa thought that the spinal or accessory nerve of Willis, was inserted so extensively into the vertebral canal for the purpose of conveying to the pneumogastric, all of the nervous influence of this portion of the spinal marrow. "The accessory nerve," he says, "which has the same origin as the nerves of the arm, ascends into the cranium to send off a branch to the vagus or pneumogastric, and thus to link sympathetically, the motions which it controls, to those of the superior extremities and the neck." Although this opinion seems to approximate that entertained by Willis, in so far as the spinal nerves may assist in establishing a sympathetic relation between the respiratory motions and those of the arms and neck, it nevertheless differs essentially from it as to its ground-work.

Willis contended that it was the pneumogastric which communicated its influence to the spinal, while Scarpa, on the contrary, thought that it was the spinal which carried the influence of the spinal marrow to the pneumogastric. These theories instead of agreeing, are really opposed to each other. It could not be otherwise, since both have based their explanations upon the same anatomical fact (the anastomosis of the spinal with the pneumogastric) interpreted in directly opposite ways.

3. *Chas. Bell* (1821). Such was the state of the question on the functions of the spinal nerve, when the discovery of Charles Bell and Magendie on the function of the rachidian nerves gave a new impulse to the physiology of the nervous system. Charles Bell and Magendie, as is known, were the first who experimentally demonstrated that the nerves of sensation were located in the posterior roots, and the nerves of motion in the anterior roots of the spinal marrow. But the English physiologist sub-divided the motor nerves into two orders: the voluntary motor, derived exclusively from the anterior fascicle of the spinal marrow, and the others presiding over the involuntary or respiratory movements, arose from the medullary fascicle. In this last class, he ranks the facial, the glosso-pharyngeal, pneumogastric, the spinal or accessory, and the hypoglossal. All of the investigations by Charles Bell were made with a view of confirming his theory of the nerves of respiration. According to this author, the spinal ought to be a respiratory nerve, because it arises from the lateral fasicle of the spinal marrow, and it is owing to this fact, says he, that it conveys to the sterno-cleido-mastoid and trapezius muscles an involuntary motor influence in connection with the normal movements of the thorax; and like the muscles to which the spinal is distributed, receives also filaments from the anterior roots through the cervical plexus; it follows, that they possess at the same time, a double motor faculty; one a voluntary, the other an involuntary. This double motor source, will, according to Charles Bell, explain, how, in certain cases of hemiplegia, when the voluntary movements are extinct, the sterno-mastoid and trapezius muscles can still assist in respiration, by raising the thorax in deep inspirations.

The opinions of Willis, and Scarpa, on the functions of the spinal, were, as we have seen, simple anatomical deductions; while Charles Bell, and afterwards Shaw, who adpots his view of this nerve, were the first authors who tried to verify their theory by experiment. The following, which is the principal experiment, belongs to Charles Bell: While the muscles of respiration of an ass were in action, this physiologist cut all of the filaments of the spinal which are distributed to the sterno-mastoid muscle. "Soon," says he, "all respiratory or involuntary motion ceased in that muscle, while the animal could still use it as a muscle of voluntary motion."

I have repeated this experiment on dogs, cats, and rabbits, without obtaining results of the same nature as those indicated by Charles Bell; and some other physiologists have also failed, as well as myself.

Bischoff also reports two experiments on dogs, in which he cut the spinal nerves on the sides of the medulla oblongata; six weeks after, the wound of the neck being cured, he observed that the motions of the sterno-mastoids were visible when deep inspirations were brought on by compressing the nostrils of the animal.

It is incontestably true, that by cutting the spinal nerves, certain movements of the sterno-mastoid and trapezius muscles are paralyzed. But contrary to the opinion of Charles Bell, it would seem that it destroyed the non-respiratory movements, since we have seen these motions continue under the influence of the cervical plexus alone. Besides, in his experiment, Charles Bell does not very clearly establish his distinction between the voluntary and respiratory movements. We shall soon return to his experiments. His report is limited to the external branch of the spinal; and, he says, not being at all on the function of the internal branch, or the portion anastomosing with the pneumogastric, which particularly attracted the attention of Willis and Scarpa.

4. *Bischoff* (1832). Since the discovery of Charles Bell, and Magendie, physiological studies have been pursued perseveringly in all directions, and have led to the most minute anatomical researches, which have settled the doctrine of the separation of motor and sensitive nerves upon new proofs. Like every favorite system, its tendency from day to day, is to generalize. Already have the important works of Sæmmering, Charles Bell, D'Eschlricht, etc., on the fifth pair, and on the facial, produced the impression, that we would be able in the same way as in the rachidian pairs, to distinguish the motor and sensitive element in the cranial nerves, and by that method reduce them to the same system.

The anatomical junction of the pneumogastric and the spinal, seems to give some reason for this view. Gœres, in 1805, that is to say, before the discovery of the properties of the rachidian nerves, had said that the origins of the vagus and the accessory could be compared to the two roots of a rachi-

dian pair. This view already indicated by Scarpa, is more recently espoused by Arnold, and some anatomists, and was taken up again by Bischoff, who had the merit of introducing it into science. In a remarkable work, this author, supporting himself on the one hand by human and comparative anatomy, and on the other by direct physiological experiment, fully ascertained the theory of Gœres, and advanced this absolute proposition: that the pneumogastric nerve (a nerve of sensation), and the spinal (a nerve of motion), have distinct origins, and are in the same anatomical and physiological connection as that existing between the two roots of a rachidian pair. *Nervus accessorius Willisii est nervus motorius atque eandem habet rationem ad nervum vagum qui sensibilitati solum modo præest, quam antica radix nervi spinalis ad posticam.*

A similar demonstration, in which the anticipations of the theory were found so fully confirmed by the experiment, produced a lively sensation. The name of the author, and of the illustrious witnesses before whom the experiment was performed, contributed to carry conviction to every mind, and caused this doctrine to be received with all the confidence that it appeared to merit.

In the meanwhile the difficulty of repeating the experiment as set forth by Bischoff, and some anatomical objections made to this view, which did not seem sufficiently resolved, in the work of the German physiologist, left doubts in the minds of a certain number of physiologists who were not entirely convinced. Muller, Magendie, etc., were of this number, and were waiting for new facts before giving their views upon the subject. Magendie had frequently repeated Bischoff's experiment without obtaining similar results; and he first pointed out certain disturbances which occurred in the carriage of the animal, and particularly in the movements of the anterior members, following the section of the spinal nerve in the cranium. Besides, in reading Bischoff's work, it is easy to perceive that this author is under the prevailing scientific tendency, and that he is determined beforehand to confirm a theoretic analogy between a rachidian pair and the pneumogastric and spinal nerves. The problem as proposed by Bischoff, has not been to study the functions of the spinal in a general way, but ruled by the systematic point of view, he asks as a consequence:

First—"Is the spinal *anatomically* an anterior root associated with the pneumogastric?" Second—"Is the spinal, physiologically, an anterior motor root, while the vagus may be the corresponding posterior sensitive root?"

The object of Bischoff's thesis is to demonstrate affirmatively these two propositions. We must take them up and examine each of them separately, in the critical estimate we will make of the doctrine which they represent.

First Proposition.—Can the spinal nerve in its anatomical relations be compared to the anterior root of a rachidian pair, of which the pneumogastric represents the posterior root?

The principal argument brought by Bischoff and the other authors who have maintained this anatomical comparison, may be summed up by saying: 1st, That the spinal nerve, like an anterior rachidian root, springs from the antero-lateral fasicle of the marrow.

2nd, That this nerve, like an anterior rachidian root, is always deprived of the ganglion in its course.

3rd, That the spinal by anastomosing in the posterior foramen lacerum by its internal branch, with the pneumogastric below its jugular ganglion, comports itself in respect to this nerve in the same way as an anterior vertebral root does, when it unites itself to its corresponding posterior root in the foramen of conjunction next to its intervertebral ganglion.

4th, Finally, it is added that the distribution of the external branch of the spinal in the sterno-mastoid and trapezius muscles, fully establish its motor property. Every one admits, indeed it is beyond doubt, that the spinal possesses the anatomical character of a motor nerve.

This does not prevent us from considering the preceding connections, which would tend to make us regard this nerve as the anterior root of the pneumogastric, from being altogether inaccurate and forced, as may be easily demonstrated.

In the first place, the manner in which the spinal arises, is not the same as that of an anterior root. This nerve takes its origin from a large extent of the spinal marrow, while each of the vertebral nerves spring from a very limited space of that organ. Then, instead of being inserted like the anterior roots, into the fissure separating the anterior from the lateral fasicle, the original filaments of the spinal nerve emerge from

a part of the marrow much further back, and very near the posterior fasicle, as we shall soon see.

In relation to its varying in volume among animals, the spinals do not appear, like an anterior root, to become larger in proportion to the increased volume of the muscular organs to which they are distributed.

Thus the spinal is not increased in animals in which the pharyngo-gastric organs acquired considerable magnitude. In the ox, which has four stomachs, all very muscular and possessing special movement for rumination, the spinal is not much larger than in the horse, which has a very small and simple stomach, in which the food remains but for a short time.

But the most erroneous relations which any one has endeavored to establish between the spinal and anterior root, is to have compared its anastomosis with the pneumogastric in the posterior foramen lacerum, to the union which takes place between the anterior and posterior roots in the intervertebral foramen.

Indeed, the two spinal roots, a little distance from the intervertebral ganglion, which belongs to the posterior root, are formed and reunited so that there is an intimate decussation of fibres between their filaments. This interlacement is complete, and looks, like a fusion of the two roots, into a mixed nerve, in such a way that it becomes impossible to distinguish if a branch springing beyond this union belongs to the anterior, or to the posterior root.

The spinal, on the contrary, is partially and simply joined by its internal branch to the trunk of the pneumogastric. Bischoff, partaking the opinion of Scarpa, Gœres, etc., thought that this internal anastomotic branch was the indistinct result of the filaments emanating from the whole extent of the origins of the spinal nerve. But the dissections of Bendy, of Spence, as well as my own, clearly prove that the anastomotic branch which casts itself on the trunk of the pneumogastric arises from only three or four of the highest originary filaments of the spinal which emanates from the medulla oblongata, while all the origins situated below, and which are inserted in the cervical portion of the medulla spinalis, compose the external branch of the spinal which is entirely for-

eign to the anastomosis of the spinal with the pneumogastric. According to these facts, they are only the originary filaments derived from the medulla oblongata which anastomose with the vagus, and which could really be sought and considered as representing the anterior root of the pneumogastric.

But the comparison, even so restricted, is still defective. Indeed, if we suppose that the internal branch of the spinal alone plays the part of an anterior root as respects the pneumogastric, it ought to be confounded with it, as an anterior root is, with its corresponding posterior root. But, instead of complete fusion, there is only a simple coupling, and the slightest dissection shows that among the filaments of this internal anastomosis of the spinal, there are some which continue directly with the pharyngeal branch of the vagus; while the branches which arise after the union of the vertebral roots are, as I have already said, so interlaced, that the most skillful dissector will not be able to separate them, so close is the connection, so intimate the fusion of these two nerves. Spence, who supported the opinion that the internal branch of the spinal alone represented the anterior root of the vagus, has not recognized the fusion of both of these nerves, for he very ingeniously compares this anastomosis to the small motor root of the fifth pair.

A serious objection should be made to the manner in which this anastomosis of the spinal is considered in its connection with the pneumogastric ganglion. For it is known that each anterior rachidian root is united to a posterior root, a little distance from the intervertebral ganglion of the latter. Most authors regard the jugular ganglion of the pneumogastric, as in its course it penetrates the posterior foramen lacerum, as the analogue of the intervertebral ganglion of a posterior root, and have thought that in this arrangement they have found an argument in favor of their theory, by saying that the spinal is united to the pneumogastric below this ganglion. But it will be necessary to prove, first, that the ganglion is analagous to the intervertebral ganglion of a posterior rachidian root. It is very easy to show that the only ganglion which might be connected with that of the posterior roots, is the one which is in the course of the pneumogastric, below the anastomosis of the spinal. This ganglion is very plainly seen, and is well de-

fined in certain animals, such as the cat and the rabbit, while in man it is represented by a diffuse ganglionary swelling of the trunk of the pneumogastric, to which the term plexus gangliforme is given, and which has been accurately described by Scarpa. Besides, the anastomosis of the spinal differs again from that of an anterior root, by being projected on the pneumogastric, really above the ganglion which is the analogue of that of a posterior root.

I conclude, from all the preceding differences noticed, that anatomically, the pneumogastric and spinal nerves have not the same relation that the two roots of a rachidian pair have, and that the connection which they have endeavored to establish between them in this respect, appears to me to be defective.

Second Proposition.—Can the spinal be physiologically compared to the anterior root of a rachidian pair, of which the pneumogastric shall represent the posterior root?

1. In relation to its recurrent sensibility. It is now perfectly established (see Vol. I.) that the anterior spinal roots, which are specially motor, manifest, however, when physically or mechanically irritated, a sensibility, altogether peculiar, inasmuch as it seems to be derived from the periphery, and has from this fact been called recurrent sensibility. The question to be determined in relation to this new character is, whether the pneumogastric and the spinal are associated by it? In a word, the question to be answered is, whether the spinal is the anterior root of the pneumogastric? To settle this, it is necessary to find out if the recurrent sensibility of the spinal is derived from the pneumogastric in the same way as the recurrent sensibility of an anterior vertebral pair is derived from its corresponding posterior root. If the pneumogastric furnishes sensibility to the spinal, it can be said, that it fulfilled in relation to it, the part of a posterior root. In the opposite case, the question to be determined will be inverted, since the essential property which characterizes the association of the two roots of a spinal pair will not be met with between the spinal and the pneumogastric nerves. But I have proved that the recurrent sensibility of the spinal is evident and well defined in the dog, rabbit and goat, and is not diminished by cutting the pneumogastric, which proves beyond cavil that it is *not*

the nerve which furnishes the recurrent sensibility to the spinal nerve. I will presently show that the recurrent sensibility of the spinal comes from the posterior root of the four first cervical nerves; so that from this point of view, it will be necessary to consider the spinal as an anterior intervertebral root, superadded to the anterior roots of the four first cervical pairs, since it draws its recurrent sensibility from the same source.

At present I wish only to deduce, from all that has been said, that the spinal does not receive its recurrent sensibility from the pneumogastric, as is the case of the anterior intervertebral roots which receive this property from their corresponding posterior root, whence I conclude, that in relation to its recurrent sensibility, the spinal cannot be considered in any way as the analogue of an anterior root of an intervertebral pair, the posterior root of which is represented by the pneumogastric.

A remark which I have never seen made by any physiologist, and which, it seems to me, will alone suffice to show clearly that the pneumogastric cannot be physiologically compared to a posterior vertebral root, is, that when this nerve is mechanically irritated it presents phenomena of sensibility essentially different from those which characterize a posterior intervertebral root. While the posterior intervertebral roots, or the mixed nerve which they form, are invariably endowed with a very lively sensibility, the pneumogastric, on the contrary, examined in the middle of the neck, exhibits at least in half of the cases in the dog, none, or very obtuse sensibility, and in the rabbit I have never been able to detect any very evident manifestations of its existence.

2. As its motor properties are effected by galvanism, is the spinal to be compared to an anterior intervertebral root?

Muller first properly used galvanism as an excitant to distinguish the intervertebral roots from each other. The experiment can be performed on the living animal or immediately after its death. The mode of proceeding is as follows: After cutting the roots of the nerves and separating them from the nervous centers, galvanism is applied to their peripheric extremity, and the true test is (acting with necessary precautions) that the galvanic irritant applied to the peripheric end

of a cut anterior root, gives rise at once to the most violent convulsions; when, if it is applied to the peripheric end of a posterior root, convulsions are never produced. To settle the question whether the pneumogastric and the spinal are in the same physiological relations as an anterior and posterior root, Muller advises the use of galvanism as an excitant. He describes the experiment thus: "To solve this question, it will be necessary to employ the method which I have used for the intervertebral nerves, which consists in applying the mechanical irritants as well as galvinism to their roots, so as to observe if these irritants applied to the accessory nerve within the cranium of an animal recently killed, brought on convulsions of the pharynx, and if the vagus nerve, treated in the same manner, would not induce them also." These galvanic experiments, described by Muller, have been repeated by M. M. Van Kempen, Hein, Bischoff and Longet.

The researches of the authors referred to, agree in demonstrating that the spinal behaves under galvanic irritation like a motor nerve, but they differ when the question to be determined is whether the movements which are provoked in this nerve are transmitted to the pneumogastric.

Hein declares that the excitation of the pneumogastric brings on convulsions of the pharynx and the velum palati. Van Kempen, on his side, says, "that these movements of the vagus, do not come from the spinal, for the excitation of this nerve does not bring on convulsions of the larynx.

Longet is opposed to Hein and Van Kempen, and maintains that the pneumogastric possesses no motor faculty in itself, because its galvanic excitation in the cranium brings on convulsions neither of the pharynx nor the larynx, while the galvanic excitation of the spinal provokes violent contractions in the larynx.

These differences in the results proceed from the different modes in which each author has defined his experiment, as I will show after a while. At present I will only remark, that I am of the opinion, now generally prevailing among most physiologists, that galvanic excitation applied to the pneumogastric may produce movements in the pharynx and larynx.

I then admit that galvanism skillfully applied, shows that the pneumogastric possesses in itself a source of motor power,

independent of that which the internal branch of the spinal conveys to the larynx; whence I conclude that "the pneumogastric does not behave under galvanic excitation like a posterior intervertebral root, and that the spinal does not furnish its motor faculty exclusively, as is the case with the anterior root as it is connected with its corresponding posterior root.

3. As to its motor function. Do vivisections demonstrate that the spinal is the anterior root of the pneumogastric?

The question yet to be examined by the aid of other experiment is, whether the spinal is the motor root of the pneumogastric, or in other words, if all the movements of the œsophagus stomach, heart and lungs, over which the pneumogastric nerve presides, derive their power exclusively from the anastomosis that the spinal (a motor nerve) sends to the pneumo gastric.

This is the opinion that Bischoff has developed in the work we have already cited. Let us examine the arguments which he advances, and the facts upon which he supports them.

Starting from the fact, that when we cut all the posterior roots of the spinal marrow, which go to a limb, at their origins, sensation alone is entirely abolished, while if we act only on the corresponding roots, motion alone is destroyed in the member, which nevertheless preserves all of its sensibility. It is easy to understand that the properties of this pretended pneumo-spinal nerve ought to be demonstrated in the same way. This may be accomplished, then, as Bischoff says, by cutting the spinal before its union with the pneumogastric, and the question will be solved, if after this section, the motor faculty of the pneumogastric is entirely abolished, as occurs after the destruction of the anterior roots which are spent upon a limb. It is with a view of finding this demonstration, that Bischoff made the experiment which I shall refer to in the sequel.

Experiments of Bischoff.—Of the seven experiments performed by this author, *one* only appeared to him authentic—*it* was the *last*. We will relate the whole of them, because of the peculiarities which they present, and because none of the arguments ought to be kept out upon which Bischoff supports his theory.

First Experiment.—Fruitless attempts to reach the origins of

the pneumogastric and spinal of a dog, by means of the trephine. "Death was rapidly produced," says Bischoff, "from the hemorrhage which resulted from the rupture of the venous sinus."

In his other experiments, the author pursued a process which consisted in opening the occipito atlantoidean membrane, after having dissected the posterior muscles of the neck, by means of an incision in the form of a T.

Second Experiment.—(A dog.) The animal, exhausted from great loss of blood, died before the experiment was finished.

Third Experiment.—(A young and vigorous dog.) The occipito atlantoidean ligament was laid bare, and the dura mater having been divided, a large quantity of the cephalo rachidian liquid escaped. Bischoff then seeing distinctly the two spinal nerves situated on the sides of the medulla oblongata, easily reached and divided them above the rachidian pair. Upon cutting the right spinal nerve, the dog howled and hung his head to the right side; when the left spinal was cut, the animal uttered the same cry and hung his head to this side. But the right lateral venous sinus having been wounded, the animal soon died.

"This experiment, like the preceding," says Bischoff, "proved nothing." "It is very difficult," he adds, "because of the great loss of blood which impedes the manual operation and weakens the animals to a point which singularly complicates the results." He continues, however, to make his experiments.

Fourth and Fifth Experiments.—(On two dogs.) Bischoff reached and divided the occipito atlantoidean membrane, and cut the two spinals in the vertebral canal, above the first rachidian pair. After this operation, the voices of both dogs were hoarse and altered. Both lived to be cured; and what was remarkable, after three weeks their voice returned with its ordinary tones. The autopsy, conducted with much care, proved that the spinals were well cut; but then it was ascertained that above the point of section, says Bischoff, some of the originary filaments were left, which allowed the nerves to perform their functions. The oblation of the nerves then had been only partial.

Sixth Experiment.—(A goat.) Bischoff began to despair of

making a perfect experiment, when, by chance, he observed that the space between the occiput and the atlas being much larger in goats, would permit him to reach the superior roots of the spinal nerves more easily. He decided to try new experiments on these animals, which, being more clamorous and sensitive than dogs, seemed to him from this fact, to be more favorable to this kind of inquiry. On the first goat, Bischoff, after opening the occipito atlantoidean membrane, was obliged to divide the bone so as to reach the superior roots of the spinal. Notwithstanding the abundant flow of blood, he cut as many of the accessory nerves as he could. The animal did not, however, lose his voice. The autopsy showed that four or five of originary filaments yet remained intact on each side. This explained why the voice had not been entirely abolished.

Seventh Experiment.—(A kid.) Bischoff repeated the same experiment on a more vigorous animal, with entire success. After complete section of all of the roots of the right spinal, the voice became hoarse in proportion as the one on the opposite side was destroyed, the voice gradually failed, and at the end of the experiment the animal could only utter a kind of sound which could not be called a voice. "Qui neutequam vox apelari potuit."

Tiedemann and Seubert were present at this experiment, and the autopsy made in their presence demonstrated that all of the roots of the spinal nerves had been cut, and that the vagus remained untouched on both sides. Bischoff never repeated this experiment, and he congratulated himself that he had succeeded once in the presence of the illustrious witnesses, who assisted him.

It is from this one single fact that Bischoff has concluded that the spinal represented the only motor root of the vagus.

The theory of Bischoff was rapidly introduced into science, and was maintained by physiologists of every country; but nowhere, doubtless, because of its difficulty, was the experiment ever repeated except in France, where M. Longet performed it very imperfectly upon a dog, which exhibited the hoarse voice after section of the origins of the spinal on one side.

(Concluded in next No.)

PROCEEDINGS OF THE COLLEGE OF PHYSICIANS AND SURGEONS.

The following extracts are made from the proceedings of the meetings held February 28th, and March 6th, 13th, and 20th, and embrace the principal topics under discussion:

Dr. Powell related the following case, which he supposed to have been one of Scarlatina, with partially suppressed eruption:

Feb. 24th.—M. R., aged seven years, of sound constitution, and up to this time in perfect health, was suddenly overtaken by a chill, which, after two hours duration, was succeeded by febrile reaction, at which time I was called to see her. The face was covered with a rash, having the characteristic appearance of scarlatina, but the rest of her surface entirely free from it, and no implication of the throat; the pulse small, the temperature of the surface irregular, the tongue dry with a brown streak in the center, the countenance as stupid and besotted as of one intoxicated, the vital energies depressed, and the whole aspect of the case suggestive of the presence of a blood-poison. I did not deem it prudent to procure any kind of evacuation, but regarding as the true indications of treatment depuration and support of the system, I at once ordered chlorate of potash, ammonia, wine whey, and animal broths.

On the 25th, the aspect of the case was not materially altered, the comatose tendency being still the prominent feature.

On the 26th, the cerebral oppression still more urgent, the tongue now dry and dark over its entire surface, stiff and almost immovable, and dark sordes collected upon the teeth; some cough, with hurried respiration being observed, and pneumonia already advanced to the second stage was discovered in the upper third of the left lung. I need not detail the treatment; suffice it to say, that from first to last, it was conducted upon the stimulating and supporting plan, and with the means already mentioned. It is not in reference to any interest that may attach to the treatment, that the case is narrated, but to call attention to an extraordinary phenomenon, viz: the entire abolition for a time of the power of speech.

Upon the ninth day of her illness convalescence commenced, the lung was restored to its normal state, the tongue was moist and clean; she had completely emerged from her comatose condition, her countenance resumed its natural expression, she heard and comprehended everything that was said, and manifested a lively interest in what was going on around her. It had been noticed that from the first day of her illness up to

the present time, the child had not uttered a word. This unbroken silence was ascribed first to the stupor, and afterwards to lassitude and supposed disinclination to talk, but now that these conditions had passed away, and she was indicating her wants by gestures, and some of them quite energetic, the painful suspicion arose that the child was dumb, the more especially as in health she was rather remarkable for her volubility. Every effort was made by commands, by persuasion, and by bribes, to induce her to speak, but all in vain; she made repeated and earnest efforts, but to no purpose—it was evident that she could not articulate. But on the morning of the next day, after a refreshing night's sleep, she uttered several sounds, somewhat indistinct, but still intelligible. These efforts she has been repeating with progressive improvement up to the present time, the twelfth day from the date of her attack, but even now her manner of speech resembles that of a child just learning to talk, and in striking contrast to the distinct and ready utterance for which she was before distinguished.

I record the fact as possessing some interest for the pathologist. I make no attempt at explanation, but leave it to others to determine the seat and nature of the lesion which occasioned this singular disability.

Dr. Bemiss thought that the symptoms pertaining to this singular case might have arisen from the toxæmia of the scarlatinal poison, whose rapid accumulation was probably due in a good measure to the non-appearance of the eruption, superadded it may be, to faulty elimination from other channels. He inquired if any delirium had been manifested in the case?

Dr. Powell said there had been some, but not persistent; deglutition was not affected, and hearing acute. He had omitted to state that there was dilatation of the pupil.

The President thought that the phenomena of Dr. Powell's case were similar to certain affections of special sense, observed in typhoid fever.

Dr. Miller thought the lesion due to a direct influence of sedation of the nervous center governing this special sense, and we need not necessarily infer the existence of either inflammation or vascular congestion.

Dr. Flint presented three pathological specimens. Two were of the form of cutaneous disease, termed keloid. They were remarkably oval and button-shaped, and had been removed from the breast of a woman. This female had suffered from successions of boils in various parts of her body, and these tumors occupied cicatrices of two boils. One curious fact attending them was, that although involving only the skin of the breast, they became very painful during menstruation, and this, without any obviously increased vascularity.

The third specimen was a tumor from over the patella, which appeared to consist of enlarged veins, although the vessels in its vicinity presented no evidences of increased vascularity. It was intensely painful, though nothing could be seen to account for this painful condition. The tumor at the time of removal was filled with coagula, and had been frequently opened and the blood permitted to escape. The tumor presented no appearance, either to the eye or under the microscope, of undue nervous development.

Dr. Bayless presented a specimen of cancer of the stomach with ulceration. The patient was about sixty years of age, and had been under the medical care of Dr. Thum, and as that gentleman was absent it would be necessary to defer a medical account of the case until he was present. He regarded this as simply a good illustration of schirrus in this region, and obedient to the laws which generally govern such affections in this locality. It was limited to the stomach, none of the surrounding organs or tissues being involved except the lymphatic glands posterior to the stomach. Examined under the microscope, he had found the specimen filled with large ovoid nucleated cells; very few had the elongated nucleated form, but were like shortened oat seeds in appearance.

Dr. Yandell then presented the rectum and colon from a child aged four months, in which intussusception had occurred, and the colon was forced down and came out at the anus. About two feet of the intestine were implicated in the invagination. He related the symptoms and treatment of this case, with references to the literature of the subject, when, upon motion of Dr. Miller, he was appointed a committee to report upon the subject at the next meeting.

ORDER OF THE EVENING.

Dr. Wible did not contemplate that it would devolve upon him to open the discussion. He, however, could mention conditions sufficiently broad to furnish topics for discussion. In these post partum accidents the laws of reflex action should be remembered. Some members had advised coarse bandage for prevention of hemorrhage; but how does it act? Simply as an excitant, like cold water, the hand in the uterus or other excitants. The next attendant of the parturient state to be referred to was, puerperal insanity. Now what is puerperal insanity? who has fathomed its mystery? It is pretty generally believed by pathologists, that in insanity there is increased vascularity of the brain, or its envelopes. It might, in puerperal insanity, be especially that of the cerebral lobes. Insanity, in this view of its pathology, might be referred to perverted action of the capillaries of the brain retarding the flow

of blood and producing congestion. Local irritation may also give rise to congestion of the brain, as irritation of the stomach gives rise to urticaria. In puerperal insanity the irritation may proceed from the womb or ovaries, or from the emotions of the female, or congestion liable to occur during labor. We see in parturient females the congestion of the face, which leads to the supposition of similar congestion within the cranium, and it is a just induction that a similar intercranial circulation takes place in insanity.

Dr. Miller had hoped to receive some light on the pathology of puerperal mania. He thinks it a lame mode of accounting for it, to attribute to emotion or the muscular effort during parturition, the prevention of the return of blood from the brain. We see these phenomena in all cases, and yet puerperal mania does not follow except as a very rare event. He has not seen more than half a dozen cases in his experience. We know next to nothing of the real essential pathology of the disease. Pathology throws no marked light upon any form of insanity. He has never seen a case of puerperal mania in which from the symptoms he could judge that there was cerebral imflammation. Post mortem examinations throw no light upon its nature, but he confessed he had nothing new to offer. Excitement generally obtains, there is great wakefulness. We should allay this excitability with camphor and hyoscyamus until sleep is produced, strengthen the system by nourishing diet, change of air, change of scene. There are seldom any indications for blood-letting. If there exist any evidences of cerebral inflammation, leeches to the back of the head, cupping, etc., might be beneficial.

Dr. Flint remarked that he had been reminded that, in his last case of puerperal insanity, he had had an erysipelatous eruption preceding the disease. He gave sedatives, anti-spasmodics, opiates, etc. Did not view the mania as a result of the erysipelas, but looked upon it as a coincidence.

Dr. Powell concurs with Dr. Miller in thinking that we are profoundly ignorant of the true cause of puerperal mania. He has witnessed but two cases. Hunter had seen but thirty, and Gooch thinks ten cases a large number to occur in the practice of any one man. It occurs in those predisposed to insanity. It sometimes occurs with a full bounding pulse, with wild delirium. In these cases blood-letting is indicated. Sometimes it is associated with, and seems to proceed from, disturbance of the chylopoietic viscera, when this should be corrected, sometimes, again, in anemic women. All these conditions must be met by proper variations of treatment. One of his cases continued forty-eight hours, and yielded to the applications of extensive cataplasms. The other case seemed

to yield to chloroform, but cannot certainly say how much influence it exerted. He thinks there is a tendency to spontaneous recovery in these cases; recovery is the rule. Permanent mania may be produced in those strongly predisposed to mania under the excitement of labor or advanced pregnancy. He also remarked that the tendency to the commission of suicide should always be looked for and guarded against.

Dr. Wible remarked that he had not expected to be able to demonstrate the pathology of insanity. He had not, however, intimated that it was a condition which implied existence of inflammation; congestion is not inflammation. Dr. Miller seems to think inflammation a necessity of vascular disturbance. Irritation of the spinal cord will produce a contraction of the vessels and give rise to pallor, and induce a species of epilepsy termed syncopal, very opposite to that of congestion or inflammation. The treatment will be governed by a correct view of the true state of the case. The brain cannot act without a supply of blood; deny it that, and there will be no action. The circulation governs the nervous system, and what you term nervousness is a condition induced by an altered circulation, since the adequate, full, or scanty supply of nervous power depends upon the state of circulation. These views can not be demonstrated by actual experiment, but "induction becomes experiment."

Dr. Miller thinks there has still been no further light thrown on the subject. He understands the meaning of the term *induction* to be the collection of facts. What then does the gentleman mean by induction? Have there been any facts collected?

At the meeting of 20th March, Dr. Wible obtained leave to read the following paper, correcting the minutes in respect to their report of his conversation on puerperal mania, at the meeting of 6th March:

At a recent meeting of this College, when the subject of Puerperal Insanity was before it, I endeavored to express some views as to the pathology and cause not only of puerperal insanity, but of insanity in general, and my remarks were not reported correctly; and, I believe, not appreciated by one or two of the Fellows. It ought to be hardly expected that such a subject could be properly unfolded in a brief extempore address, or even within the limits of an ordinary essay.

My object now is to condense here the views which I attempted to express, so that the Fellows of the College may be fully able to judge if they possess a value or not.

I do not complain, and I trust I shall never complain, that members do not discover merit in doctrines I may advance, but it would be far more gratifying to me if they would demonstrate that lack of merit, rather than flatly assert it.

I announced on the occasion referred to, that in insanity there must be an abnormal nutrition of the brain, and especially of the cineritious or peripheral portion of it—that there must be a deviation from the normal condition of the capillary structures of those parts; and that this deviation consisted in a condition of those capillaries analagous to that which occurs in the cheek or nose of the drunkard. In some drunkards, there is found a permanently red cheek or nose, which obviously depends on some change in the blood-vessels of those parts; the change can not be denominated inflammation, and these capillaries must be liable, therefore, to some other modification.

To my utter surprise, this view of the pathology of insanity was positively denied; the denial resting upon the fact that in persons dying insane, no occular evidence was found of the existence of inflammation, or of any vascular change in the brain or its membranes. I admitted that in many examinations of the brains of persons who had died insane, no evidence appeared *to the eye* of any morbid action, yet I contended that the knowledge of the physiological action of nervous structure, indicated unmistakably, that the brain, especially its capillary blood-vessels, in all cases of insanity must of necessity be the subject of some organic change.

To render my position obvious, that in insanity there is a vascular change in the cerebral structures, I will proceed to give some of the reasons for this belief; and these, for the sake of clearness, may be divided into, first, those reasons which depend on our knowledge of the physiological action of nervous structures; second, those which depend on certain well known causes; third, those which depend on certain physical changes known to exist; and fourth, those which depend upon authority.

1st.—In some well conducted experiments, made by Dr. Brown Sequard, to show the influence of the blood in maintaining, and as essential to the action of all nervons structures, it is conclusively proved that before the brain can act, it must be supplied with blood. He was enabled at will to excite the brain to action by supplying it with oxygenated blood, and to suspend its action by withholding the supply. The following aphorism is laid down by this celebrated physiologist, which he proves by a series of ingenious experiments, viz: "The encephalon after having completely lost its functions and its vital properties, can recover them under the influence of oxygenated blood." Sir Astley Cooper, before Brown Sequard, proved by experiments on animals, that the manifestation of the encephalic functions was in a direct ratio to the supply of blood. It is known, and admitted by all physiologists, that normal mental excitement is attended with an augmentation of blood in the brain.

2nd.—One of the most frequent causes of insanity as admitted by all observers, is *injuries of the head.* In these cases, no doubt, the cause is a protracted congestion, and even a temporary inflammation of some part of the brain.

3rd.—It is a well ascertained fact that amentia following mania, is attended with atrophy of the brain, the encephalon not weighing over an average by five ounces its normal weight. How can we concieve of atrophy of the brain without admitting vascular change?

4th.—I have consulted but one authority—the work of Bucknill & Tuke, republished by Blanchard & Lea, in 1858. I will quote from it. "The broad view of its (insanity) production appears to be this: the brain, like every other organ of the body, for the perfect performance of its functions, requires the perfect condition of its organism, and its freedom from all pathological states whatever. Consequently the existence of any pathological state in the organ of the mind, will interrupt the functions of that organ, and produce a greater or less amount of disease of the mind; that is, of insanity. Such is the pathology of insanity which we maintain." In the chapter devoted to the pathology of insanity, in this book, the leading idea inculcated is that the disease depends upon some change of structure of the brain, upon a change of its nutrition, and consequently upon some deviation in the circulation—all points positively denied as legitimate before this College.

Without further consuming time in enumerating the proofs, to show that there must necessarily be a modification in the circulation of the brain, I will now proceed to state what I believe to be some of the causes of this modified cerebral circulation.

In the first place, I freely admit that some cases of insanity arise from injuries, or from inflammation of the brain. Also, from intemperance, or other causes local to the brain. But many cases of the disease are produced, evidently, by causes not primarily in the brain. Even in cases of insanity produced primarily by cerebral inflammation, the action of remote irritations, or of emotion, will aggravate and keep up the disease.

Recently, before this College, I attempted to explain the mode by which remote causes, and emotion, effected disturbance in the cerebral circulation, and the consequent production of insanity, and it was asserted that I made no explanation at all.

I spoke of two modes: one was, that the contraction of the muscles of the neck as the effect of remote irritation, or of emotion, prevented the return of venous blood from the brain. This contraction of the muscles of the neck, and the consequent fullness of the veins of the head, is readily observable in what is called nervous or excitable persons. Surprise, anger,

and many other emotions, can be observed to produce flushing of the face, fullness of the jugular veins, as well as muscular contractions of the sterno cleido mastoid, and other muscles in that region.

A similar contraction of the muscles of the neck is observed to follow remote irritation. "An acid stomach produces a feeling in the neck as if transfixed with a spike, or of choking, or as though the shirt collar was too tight." It is known that undigested food in the alimentary canal will cause dreams, headache, and other manifestations of a disturbed cerebral circulation. An imperfect renal, or hepatic secretion, will produce the same effect. Almost any remote irritation, as cold feet, disease of the uterus and its appendages, constipated bowels, etc., etc., will produce severe headaches. Now, when we find insanity to be so frequently the result of these remote bodily infirmities, and knowing the effect they produce upon the cerebral circulation, does it not amount to an absolute certainty that they produce the mental derangement by modifying the cerebral circulation? Is it wonderful that persons who habitually live on indigestible food, and have impaired digestion, and are the subjects nightly of hideous dreams, should after years of abuse of this kind become the subjects of a permanently disturbed capillary circulation of the brain, and consequently of insanity?

There is the closest relation between the distal irritations and emotions; both transmit their influence to the spinal cord, and thence motor impulses to the muscles. But the irritations long continued, in the first place induce an erethism, or an augmented excitability of the spinal centers, and then slight irritations, or emotions, acting on the excitable nervous centers produce the abnormal muscular contractions. We always find in the maniac a preternaturally active state of the muscular system, which implies a preternaturally excitable state of those nervous centers which govern muscular motion. In this condition mental motions play continually upon the excitable nervous centers which govern the muscles. In turn, muscular contraction produces the altered state of the circulation of the brain.

A still further proof that muscular action produces cerebral congestion, is found in the history of epilepsy. In that disease the effect of the paroxysm, the powerful contraction of the muscles of the neck, which frequently twists the head the quarter of a circle on the body, is to dam up the venous blood in the head, producing ecchymosis beneath the conjunctiva, deep congestion of the brain and coma, and sometimes fatal extravasation. It is too well known how often insanity follows repeated epileptic attacks.

But the peripheral irritations, or rather excitations, and mental emotions interfere with the cerebral circulation in another manner. How can we account for syncopal epilepsy, or the pallor of fear and of other emotions?

These were phenomena which puzzled Dr. Marshall Hall. He was satisfied that what he called torticollis, produced cerebral congestion, and its "dire effects," but he could not account on that principle for syncopal epilepsy.

The investigations of Schiff, Kusmaul, and Tenner, and Dr. Brown Sequard, go to show that excitations made upon the spinal centers, are capable of transmitting to the blood-vessels a power of counteraction. Certain peripheral excitations convey an impression or an influence to the spinal centers, thence a motor (*vaso motor*) impulse to the blood-vessels of the brain, causing them to contract, and to interrupt the supply of blood to the brain. Judging from the experiments of these celebrated physiologists, I am led to believe that the contraction takes place even in the minutest capillaries, and that after the contraction there follows a more or less prolonged paralysis, and consequent dilatation of the same vessels. This indirect influence of the spinal centers on the blood-vessels is not limited to those of the brain, but it extends to blood-vessels in other parts of the body. Thus it is known, that Flourens supposed he had demonstrated the vital point to be situated in a little place in the medulla oblongata, the touching or destruction of which he asserted was to destroy life instantly; but Dr. Brown Sequard has shown this not to be the vital point, but an irritation of it will cause a vaso motor impulse to be transmitted to the proper blood-vessels of the heart, causing contraction of them, and consequently interruption of the nutrition of the organ, suspension of its functions, and instant death.

Now, in my remarks before the College, I stated that it was well known that certain peripheral excitations, especially that of indigestible food on the alimentary canal, would cause nettle rash, in which there is evidently a modification of the capillary circulation of the skin. I believed that I was entitled to conclude that this modification of the capillary circulation was effected through the agency of the nervous system, especially since Dr. H. F. Campbell had shown that lesions of certain nervous centers were followed by congestion and inflammation of the skin.

If irritation of the alimentary canal will produce such a modification of the capillary circulation of the skin, may we not legitimately infer that it is not improbable that a similar modification of the capillary circulation of the brain takes place as the effect of distant irritation.

Especially in puerperal insanity, we have reason to believe

that it is produced by sympathetic or distal excitation. I have observed, following parturition, certain remarkable local congestions of the skin resembling chronic urticaria, and thus was led to infer that it was probable that a similar morbid action sometimes takes place in the cerebral capillaries.

We can abundantly account for puerperal insanity being produced by sympathetic irritation and emotion. During gestation, parturition, and the post partum state, the woman is especially liable to them. The disturbances of the uterine organs, the almost constant derangement of the digestive system, and the mechanical interruption to the renal and other functions which attend gestations, and the various morbid actions which accompany the post partum period, are ample sources of irritation. The emotions are also peculiarly active in these states. In addition to the irritations and emotions spoken of, the parturient efforts should not be overlooked, as tending to contribute to the cerebral congestion.

Whatever may be the exact mode by which the nutritive and vascular derangements in the brain are produced by remote irritations, enough is known to guide us in the treatment of insanity.

In regard to the treatment, I referred only to the principles which guide in the management of it when it arises from distant or sympathetic sources of irritation, and from emotions.

In each case the particular morbid action should be sought and removed. To say to correct the general health, is not precise enough. The stomach, the small intestines, the large intestines, the external organs of generation, the vagina, uterus, the urinary organs—indeed any of the surfaces and structures of the body may be the seat of the irritation which gives rise to the malady. Wherever morbid irritation is found, it should be removed. Next, the emotions should be quieted; and for this purpose, nothing is so important as to present new objects of observation and thought to the mind. Hence the universal sentiment that, in the treatment of insanity, isolation from family and friends is so important. Even the confusion of an insane asylum is considered beneficial, as tending to draw the mind from thoughts which produce emotion. The great and indispensable advantage of constant and interesting employments and amusements is found in part for the same reason.

The next principle of treatment consists in using those medicines and means which lessen the activity of the motor system—of the excitability of those nervous centers which govern muscular motion. Hyoscyamus, conium, belladonna, and sometimes opium, are the leading medicinal agents. Well regulated exercise in the open air and cold bathing are also

means to diminish nervous excitability. Good, nutritous food, such as is neither tardy of digestion, nor irritating, is required. The narcotic agents are beneficial by quieting morbid sensations, as well as by allaying motor excitability; but this latter indication is the great point to be regarded in the treatment of insanity, because the irritations and emotions play upon this excitability, which, by producing the muscular contractions spoken of, keep up a disordered state of the cerebral circulation.

Such is the substance of the doctrines which I attempted to present in some extempore remarks before this College. In this written statement of them, I am aware that the important doctrines indicated are hurriedly and imperfectly expressed and illustrated. If the doctrines which I have attempted to present are true, the treatment deducible from them must be more satisfactory than those vague, antiquated notions which have neither a recognized pathology nor physiology as a guide or basis, and which were presented and contended for so tenaciously by one of our learned Fellows.

At the meeting on the 27th March, Drs. Wible and Thum, from the committee appointed to investigate the expense and practicability of instituting a system of meteorological observations, made the following report:

METEOROLOGICAL.

The committee report, that

Green's Standard Smithsonian Barometer will cost			$35 00	or,	$25 00
" Thermometer External,	"		5 00	or,	2 50
" " Maximum Register,	"		5 00		
" " Minimum "	"		5 00		
" Psychrometer, wet and dry bulb Ther.	"		6 75		
Rain Gauge,			8 00		
Total prices,			$64 75	or,	$51 25

In addition to the above, the Snow Gauge and Wind Vane are necessary instruments, the prices of which are unknown to us, but it is believed they can be furnished for $5, which would make the total instruments cost, $69 75; or, cheap form, $56 25.

The committee are impressed with the importance that meteorological reports, in conformity to the requirements of the Smithsonian Institution, and in obedience to the recommendation of the National Medical Association, should be made in Louisville. They could not fail to be of interest to the members of the College, and to the community generally, beside contributing to the general stock of scientific knowledge; but as a considerable outlay of money will be required to make the observations—to buy instruments and to employ a competent person to attend them—they think the undertaking would be too great a burden to the College at this time.

Signed,

B. M. WIBLE,
MANDEVILLE THUM.

On motion, the report was received and the committee continued, with instructions to confer with other scientific societies or individuals, and ascertain if their co-operation can not be obtained to carry into effect the proposed system of observations.

Dr. Powell related the following case of uræmic convulsions.

The patient was a young woman in the sixth month of her second pregnancy; the first having terminated in abortion near the second month. He had been called to prescribe for a neuralgic affection of the head and face of this lady, and had at the time of this visit observed a good deal of anasarca. He had for the neuralgia prescribed carb. ammon. and hyoscyamus, and on the next day she was relieved of the pain. On the following day, however, she had been seized with violent convulsions, which recurred six or eight times, and were succeeded by profound coma. He had practiced free bleeding, both by venesection and the application of leeches. At this point Dr. Rogers was associated with him in the management of the case. Her bowels had for some time past been rather obstinately costive, and attempts were made to purge with elaterium, with rather unsatisfactory results. Her urine upon examination showed the presence of albumen in great abundance. For several days of their joint treatment, they had been occupied with efforts for the relief of various troublesome symptoms. On the fourth day she was delivered of a fœtus whose appearance indicated that it had been several days dead. He supposed its death might have been synchronous with the convulsions, not however, as was formerly believed, occasioned by the violence of the maternal convulsive movements, but due to the same state of toxæmia which had produced the convulsions. This was Braun's theory, and he had no doubt of its correctness. They had now prescribed two and a half grains of iodide-potash every third hour. Very abundant diuresis had ensued, with great relief to the patient.

During the last day or two they had superadded the benzoate of soda. Upon careful test of the urine to-day, not a trace of albumen was found. In this case neither the bleeding nor the chloroform had seemed to exercise the slightest control over the convulsions; they had continued to recur during the influence of the chloroform. We must look, he thinks, in puerperal convulsions, to the quality as well as the quantity of blood. He had omitted to state that in the early progress of this case, he had endeavored to relieve the enormous labial œdema by acupuncture. He was aware that this practice was reprobated by some, as endangering sloughing, but in this case he had no apprehension of such a result. His patient seemed very manifestly improved, but he was not as yet able to pronounce her convalescent, and would report to the College any important changes which might occur.

Dr. Thum stated that he had treated a case with symptoms very analogous to Dr. Powell's. He only wished to note one difference, which was that in his case chloroform had perfectly controlled the convulsions.

Dr. Powell mentioned a case of labor which he had attended, in which a firm band, evidently from a cicatrix, had so nearly closed the vagina, that the opening was not larger than a twenty-five cent piece. This was a second labor; the first having been very difficult and requiring instrumental aid. This had, however, been afforded by a very skillful professional gentleman, and he supposed the sloughing to have been due to the long continued detention of the head in the vagina, and not to the use of instruments He had overcome the obstacle to the progress of this labor by free incisions through the barrier, and delivery had been accomplished without further difficulty.

Dr. Caldwell inquired for the experience of the Fellows in regard to the effects of oxalate of cerium in the vomiting of pregnancy. He had used it in three cases; the first had been promptly relieved; the second had not only found no relief, but had complained that the medicine always vomited her. She had, however, only taken it once or twice, and then at morning, when her symptoms were always aggravated. She was so convinced of its inutility that she rebelled against its further use. The third case derived so much benefit from the use of the remedy, that she had voluntarily continued it for two or three weeks.

Dr. Powell had used this salt of cerium with one patient, in whose instance vomiting had been a most obstinate symptom throughout several pregnancies. Twelve pills, of one grain each, one three times a day, had been followed by complete relief.

The President had used it in grain doses every three or four hours without obvious benefit. He was also able to add that Dr. Rogers had failed to derive benefit from its use.

Dr. Wible said that it was remarkable that a member of our profession occupying Dr. Simpson's high position, should manifest this non-professional hankering after specifics. Vomiting in pregnancy was a symptom which proceeded from many causes, and no one remedy should be held up as a specific; nor should we feel justified in prescribing for this symptom, or the symptoms of any disease, without a knowledge of the under-lying conditions which determined these phenomena.

Dr. Powell thought that, with all due deference to scientific medicine, which advised no action without a knowledge of first causes, we were obliged in many cases to resort to empirical practice.

Dr. Thum concurred with Dr. Powell in opinion, that we were obliged to admit the use of certain curative agents altogether empirically. He had found bisulphite of soda and crab cider a specific for vomiting of pregnancy.

Dr. Wible asked if Dr. Thum suspected the presence of sarcinæ? He still contended that the wise physician would always seek for conditions at the bottom of symptomatic phenomena.

Dr. Caldwell had used crab cider, but had combined iron with it. He thought these cases generally required chalybeates.

The President stated that he had a case of very distressing vomiting associated with pregnancy under his charge, and after complete failure of all his prescriptions, had advised cold hip bath. The husband had modified this suggestion by pouring a pitcher of cold water down the spine, with prompt alleviation of symptoms whenever resorted to.

Dr. Polk related a case of violent sickness in pregnancy in a newly married female, in which he had for some time been at a loss to determine the patient's condition, from the fact that she had on the day previous to her marriage purposely arrested the catamenial flow by injections of cold alum water, and he could not for some time ascertain whether hers was a case of pregnancy or amenorrhæa. In this case chills of a violent congestive character were associated with the other symptoms. No prescription availed anything to check the vomiting. Quinine was given by injection and blistered surface to break down the recurrence of chills, but without success. The symptoms all continued until the fluids ejected became of coffee-ground appearance, and the patient sank rapidly and died, having two or three days prior to death thrown off a three months' fœtus.

These are the principal topics of interest which have engaged the attention of the College of Physicians and Surgeons during the past month. It might not be uninteresting to the reader, however, if we were to bring to his notice a part of the conversation occurring at the meeting of Tuesday, February 28th.

Dr. Caldwell stated that a gentleman passing along the street, had been bitten by an unknown dog. The animal had merely snapped his leg as it passed along; had immediately afterward snapped at a pig in such an unusual manner as to impress the man with the belief that the dog was a subject of canine rabies. He saw the wound in about twenty-four hours after its infliction—it was a mere cuticular abrasion, but had been much inflamed by the application of ammonia and other stimulating agents, and to-day it is much swollen and irritated from this rude treatment. He is applying emollient poultices, but the only important question engaging his mind is, as to the probabilities of hydrophobia resulting from the bite.

Admitting that the dog was hydrophobic, which he thinks scarcely probable at this season of the year, he thinks the poison would have been wiped off the teeth by the thick pantaloons worn at the time; but upon supposition of poisonous impregnation of the wound, what steps are advisable to prevent disastrous consequences?

Dr. Bemiss remarked that so far as it respected season, former reports and statistics went to prove that canine madness occurred more frequently in cold than hot weather, and that it was more common in Northern than Southern latitudes. He had known of a bite under similar circumstances, occurring under the observation of his father, who, like Dr. Caldwell, had supposed that there was but little likelihood of poisonous impregnation from the unusually thick, dense clothing worn by the bitten man. The subsequent history of the man had proven, so far as absence of hydrophobic symptoms were to be taken as proof, that no penetration of poison had occurred.

The President stated that instructions had been given to excise the wound at any period after its infliction. The treatment appears rational, as there seems to be a poison latent in the wound contaminating the system. In a case of a hydrophobic man which had occurred under his notice, ten weeks after the reception of the wound poison seemed to develope anew from the wounded point. The pain had occurred first in that region, and all the elements of mischief had seemed to center in that spot and radiate from it.

Dr. Thum said that he had used nitrate of silver. He did not concur with the President in opinion that poison lurked in the cicatrix.

Dr. Ronald inquired if any of the Fellows had any knowledge of the popular use of the mad-stone? He had, in early life, known of an instance of two boys, one eleven, the other fourteen, having been bitten by a dog. Both were taken to a mad-stone, and at the time of its application, two or three days after the bite, the old man who applied it, and who professed himself a great expert, predicted that the one would get well and the other become hydrophobic and die. He based this prediction upon the manner in which the stone behaved on application, an interpretation none understood but himself, but the singularity of the whole affair was, that his prophecy was verified in the actual history of the two children. This circumstance added very much to the reputation of the mad-stone in that region, but he had no doubt the old man's discernment was founded upon his observations of the locality and character of the wounds rather than the phenomena attendant upon application of the stone.

The President observed that the reputed power of the mad-stone was due to the fact, that a very small per cent., not over one in twenty, of those bitten do actually become rabid.

Dr. Bemiss said that the mad-stone could not possess any efficacy beyond the fact that its loose texture and porosity gave it great powers of imbibition, and he did not doubt but upon its application, a very limited degree of retrograde circulation would be set up in the wounded part, but altogether too feeble to afford a shadow of protection.

Dr. Brandeis remarked that, besides excision in a recent case, it is most important to use such local remedies as are not liable to produce eschars, the poison may be absorbed beneath the eschar, and it is better to resort to such remedies as promote suppuration. Nitrate silver, muriatic acid and sulphuric acid, should all be prohibited, and warm poultices, ointment of cantharides and similar applications used. In Germany instructions are published by Government in regard to prophylactic precautions after a suspected bite: one is, that the dog shall be confined and kept under observation to determine if he be really hydrophobic; another consists of such treatment as he has just recommended.

It may interest the reader to know something further in regard to mad-stones or snake-stones, for it would seem that in respect to these two venoms their preventive properties are convertible. The stone which is a mad-stone is also ex-officio a snake stone, and vice versa.

The following episode in the history of mad-stones in this country is furnished by Dr. Mease, in No. 1 of the Philadelphia Medical Museum for 1808:

I should have permitted the miraculous account of the snake-stone, as given by William H. Harding in your last volume, p. 240, to have died the silent death which it justly merited, did I not feel concerned lest the character of our country should suffer in the opinion of reasonable men in other parts of the world, if it were permitted to pass unnoticed. An entire silence upon the subject would apparently authorize the belief, that whatever opinion might be entertained respecting the snake-stone and its virtues, no fact or argument could be adduced against it; one protest, therefore, at least, shall be offered upon the occasion.

I ought to premise, before proceeding further, that the stone celebrated by Mr. Harding is not the only stone in Virginia, or in the world, supposed to possess the virtues of extracting the poison from venomous animals. In the autumn of 1805, a Mr. Micow, of Virginia, announced to the public his being

possessed of such a stone, and proposed to the inhabitants of four or five adjacent counties, to sell it for the moderate sum of $2000, in shares of $10 each. Lately, at Washington City, another stone of a similar nature has been announced in the papers. At or near Bustleton, in Philadelphia county, a man possesses one of these snake stones, which has obtained as much celebrity in the vicinity of the owner as those in Virginia. Mr. Harding himself mentions one being in the possession of Joseph Fredd, of Loudon county, Virginia. Lastly, in India such stones are very common, and the credulous natives believe as firmly in their preservative powers against the effects of the bites of venomous snakes, as the Chinese do in the universally salutary operation of the famous ginseng root. The author of the "*Wonders of Nature and Art*" thus notices these stones, in the account of Tonquin: "Persons who happen to be bitten by serpents press out the blood, and apply a small stone called the *serpent stone*, which is said to possess the miraculous power of drawing out the poison. When impregnated with the venom, it drops off like a leech. It is then carefully washed with milk and water, in which lime has been diluted; and, on a second application to the wound, it exhales all the virus so completely, that, in less than an hour, the patient becomes perfectly free from pain."—*Vol. VI, p.* 271, *Philadelphia edition.*

Two of these stones are in the cabinet of the Philosophical Society, and another one is in my possession, all of which were brought last year by a gentleman from India. They are rather more than an inch long, and about five-sixteenths of an inch broad, of a blueish or slaty color, and flattish shape.

When I first read the proposal of Mr. Micow in the Richmond Inquirer, for the sale of the specific, I was at a remote corner of the Union, viz., St. Simon's Island, Georgia; and as I was well persuaded of the imposition attempted to be practised upon the people, I wrote an address to them without delay, and gave my reasons why I did not believe that the smallest particle of medical virtue resided in the stone; accounting, at the same time, for the supposed preventions of the disease by it; for it must be remarked, that no curative power was allowed to the stone after the disease has actually come on. The piece was sent to Savannah, for insertion in a newspaper, and a copy directed to be forwarded to the editor of the Richmond Inquirer; but it was mislaid by the printer for some months, so that my endeavors to serve the people of the counties called upon to buy the stone were rendered fruitless. Indeed, I might have saved myself the anxiety upon the occasion; for, from what I have since learnt, the people of Naples do not more firmly believe in the miraculous liquefaction of

the blood of St. Januarious, than do many of the good people of Virginia, with respect to the infallibility of the snake stone. It will scarcely be credited at a future day, when numerous failures of the now famous remedy shall have taken place, that the proposed number of shares was filled up in a few weeks; and that, after a meeting of the subscribers for the purpose, the stone was deposited in the hands of Dr. Brockenbrough, of Tappahannock, as a central spot, whence it might be most readily obtained, when desired by any of them. Mr. Micow no doubt feels very snug at the receipt of $2000; and the worthy stockholders are quite secure from even the apprehension of danger from all the attacks of rattle snakes or mad dogs in their counties!!

My address, when found, was sent to Richmond, to my friend Dr. Trent, who inserted it in the Inquirer. In addition to what I have now to say, I may repeat, with propriety, what I then stated, and I earnestly beg the serious attention of all concerned to my remarks, viz., that the deception with respect to the supposed efficacy of these stones, and of all other preventive remedies, arises from the following causes: 1, from the snake giving the bite not being venomous; 2, from the dog not being mad; 3, from the wound, whether from snake or dog, being made through clothes or leather; 4, from the known and established fact, that not one in twenty persons who are bitten by dogs *actually mad*, are ever attacked by the disease.

Then again, with regard to the infrequency of the occurrence of hydrophobia after bites of undoubtedly rabid dogs, he says:

Numerous writers of the most established credit have recorded, that not one of a great many persons bitten by dogs actually mad, ever take the disease which sometimes arises from a bite. The "celebrated" Cocchi,* as Van Swieten calls him, relates, that, among several persons bitten at the same time, some died, notwithstanding the most noted methods of cure had been used; and that others again remained perfectly well, although they underwent no manner of treatment. Dr. Vaughan† informs us, that "of between twenty and thirty persons, who were bitten by the dog which gave the fatal wound to the boy," whose case he relates, "not one felt the least ill effects except himself." "I know," says Mr. John Hunter, "where there were twenty-one people bitten by one dog; nothing was done for any of them, and only one was taken ill: if they had taken medicine, then it would have been said, that they only lost one out of twenty-one."‡ Dr.

* Bagni di Pisa, p. 318. Van Swieten's Comment. Aphor. 1137.

† Cases and Observations on Hydrophobia.

‡ Letter to Dr. Hamilton. Remarks on Hydrophobia, p. 213. London: 1798.

Houlston* says, that, "out of nine persons bitten by one dog, only one was taken ill."

Lastly, some persons have a fortunate inaptitude to take the disease. "I once knew a footman," says Dr. James,† "who was three times bitten by dogs manifestly mad, insomuch that several animals bitten by the same dogs, near the same hour, contracted the distemper, and died. This fellow could not be persuaded to do the least thing by way of precaution, and yet never had the least tendency to hydrophobia."

Some of the above facts were formerly published by me,‡ upon the disease in question; but as the pamphlets which contain them are not now to be purchased, and it is of great consequence to undeceive the public with respect to an error of so much importance as trusting to an inert remedy to prevent an awful disease, I thought it better to state them at length than barely to refer to books, which can not be supposed to be within the reach of those for whom this paper is principally intended. I think they ought to satisfy every one of the absurdity in attaching the least credit to the snake stone, or to any other preventive internal remedy or external application. The only rational means of prevention, and which should never be neglected, are, enlarging the wound, if necessary, pouring water, either warm or cold, upon the wound from the mouth of a teakettle, and keeping the part open for several months. The inutility of all internal remedies will be obvious when it is known, that the disease has been known to attack in all the intermediate periods between a few days and four years.‖

The world has long been gulled by numerous specifics for the prevention of the dreadful disease arising from the bite of a mad dog; but they have all, in the end, lost credit, owing to their repeatedly failing, and to the publication of such cases in the medical journals. In this country, I know of only four specifics which have acquired credit for the same purpose, viz., one by Kettering, of Dauphin county, in this State; the snake stone of Virginia; Machant's pills; and the remedy of Mr. Crous, of New York. Mr. Kettering had been famous for upwards of thirty years, for the cure of the disease, and was consulted by all ranks in several of the States.§ In conse-

* London Medical Journal, vol, vi.

† Treatise on Canine Madness, p. 40. London: 1760.

‡ Inaugural Dissertation. Philadelphia: 1792. Observations on the Arguments of Professor Rush, in favor of the inflammatory nature of the disease produced by the bite of a mad dog. Philadelphia: 1801.

‖ Medical Repository.

§ A gentleman informed me, that, several years since, he met a negro man, servant to General Washington, at Hagarstown, in Maryland, who had been to Kettering on account of a bite from a supposed mad dog.

quence of the secret having been stolen from him, he determined to make it public, and applied to the legislature of this State, in their session of 1800–1, and stated that he originally brought the remedy from Germany, but found it afterwards in this country; as usual, he added that he had never failed in a single instance for upwards of thirty years, and offered, at the same time, to disclose the remedy to the public, trusting to the liberality of the legislature for suitable remuneration. A committee was appointed to confer with him; the plant was shown, and, upon consulting that excellent botanist, Dr. Muhlenberg, of Lancaster, it was found to be a common plant of our country, viz., the *anagallis arvensis*, or common pimpernel, or chickweed. As the proof of its preservative powers rested upon the mere authority of the applicant, the committee did not think proper to recommend any reward for him, but contented themselves with making honorable mention of his patriotic conduct.

We leave Dr. Mease to tell in his own spirited language, how the Legislature of the Empire State was itself *sold* in an effort to buy a specific for hydrophobia:

Here comes the climax! It would seem that Mr. Crous, of New York, had been long famous for the prevention and cure of the disease under consideration, and that the legislature of the State purchased the secret from him, whether upon his petition or their request, I know not; the following is the statement upon the subject, taken from the public prints, and I think will astonish the world:

STATE OF NEW YORK, *Comptroller's Office.*

Pursuant to the direction of an act entitled 'An act for granting a compensation to John M. Crous for discovering and publishing a cure for the canine madness,' passed the second of February, 1806, I do hereby certify, that the said John M. Crous hath this day deposited in this office a certain writing, purporting to be the remedy used by him with certain success, for more than twenty years past, for the cure of the hydrophobia, or canine madness, which writing is in the words and figures following, to-wit:

CURE FOR THE BITE OF A MAD DOG.

The following is an account and prescription of a cure for the hydrophobia, or canine madness, made by John M. Crous, in conformity to an act of the legislature of this State of New York, passed in their present session, viz:

1st, Take one ounce of the jaw-bone of a dog, burned and pulverized, or pounded to fine dust.

2dly, Take the false tongue of a newly foaled colt; let that be also dried and pulverized; and,

3dly, Take one scruple of the verdigris which is raised on the surface of old copper by lying in moist earth: the coppers of George I. or II. are the purest and best. Mix these ingredients together, and if the patient be an adult, or full grown, take the common teaspoonful a day, and so in proportion for a child according to its age, one-half of the copper of the above kind, if to be had; if not, then a small increased quantity of any baser metal of the same kind: this to be taken in a small quantity of water.

The next morning, fasting (or before eating), repeat the same as before. This, if complied with after the biting of the dog, or before symptoms of madness, will effectually prevent any appearance of the disorder: but if after the symptoms appear, a physician must immediately be applied to, to administer the following, viz:

Three drams (or 180 grains) of verdigris of the kind before mentioned, mixed with half an ounce of calomel, to be taken at one dose. This quantity the physician need not fear to administer, as the reaction of the venom then diffused through the whole system of the patient, neutralizes considerably the powerful quality of the medicine.

Secondly, if in three hours thereafter the patient is not completely relieved, administer four grains of pure opium, or one.

N. B. The patient must be careful to avoid the use of milk for several days after taking any of the aforegoing medicine.

JOHN M. CROUS.

Albany, ss. John M. Crous being duly sworn, deposeth, that the above account and prescription for the remedy and cure for the hydrophobia, or canine madness, is a just and true account and prescription, and the only one used and practiced upon by himself more than twenty years past, and which has not failed of perfect success in any instance of the vast number of unfortunate human beings who have been bitten by mad dogs, and who have applied to him, the deponent, for relief. JOHN M. CROUS.

Sworn the 24th day of March, 1806, before me, James Kent, Chief Justice, &c.

Mem.—The word *three* in the last line of the first page written before an erasure, and then sworn to. J. KENT.

Given under my hand, at Albany, the 25th day of March, 1806. ELISHA JENKENS, *Comptroller.*

Upon the above extraordinary act, I will make only this remark. The good people of Virginia certainly had a right to buy the snake stone of Mr. Micow with their own money, but for a legislative body to throw away the public treasure in the purchase of a secret, without first knowing whether the prescription was even reconcileable to the principles of common

sense, and which, when revealed, must strike every man as the most abominable absurdity, is a conduct highly unjustifiable, and must subject them to the ridicule of all the civilized world.

The literary trimmer finds it a difficult matter to cut down so interesting a paper as that from which we are making these extracts, and we can not afford room for all of it. We must, however, give space to the following remarks upon the treatment of hydrophobia, not because of any intrinsic merit they possess in point of practical utility, so much as to exhibit to our readers a practitioner of half a century ago, who not only felt the requirements of such an agent as chloroform, but who seemed to have been, in his own enthusiastic spirit, almost vouchsafed a glimpse at the dawn of its light—a light not developed to the profession for full forty years after these foreshadowing sentences were penned.

Another remedy, when its administration is practicable, might be tried. I mean *hydro-carbonate.* It is well known that the irritability of the system in both diseases, but particularly in that produced by the canine virus, is excessive, and that this constitutes one of the greatest obstacles to the administration of medicines. The warm bath, opium, all the remedies which so effectually remove this symptom in other diseases, have not the smallest effect in this, however large the dose. Those who have seen the disease will agree with me that it has no parallel in the list of human maladies; and as the antispasmodic virtues of the hydro-carbonate gas have been fully ascertained, and *we are yet on the look out for a remedy*, there can be no objection to a trial of it, as proposed some years since by Mr. Bar.* Pneumatic medicine has not found any advocates in this city; the success of the European practitioners, however, especially Dr. Thornton, ought to induce a trial of airs which have been found salutary, particularly in those diseases in which physicians so seldom give relief by other remedies.†

* Beddoes' Communications.

† Thus Dr. Thornton has lately announced his success in the cure of two cases of asthma, by causing the patients to inhale oxygen gas. He had before recorded a case of the same disease, which appeared to be a gouty affection, cured by the same remedy. See Tilloch, vol. vi.

"A deterioration of atmospheric air, by a mixture of hydro-carbonate, has been found advantageous in epilepsy, and other convulsive diseases in young and plethoric habits, especially where the fits recurred in sleep. By moderating this irritation, the fits ceased; the pulse was reduced in frequency, and natural repose took place. Where sleep has been broken, and a habit of nocturnal watchfulness induced, it has been proposed, as a counteracting remedy, and under the sanction of

Should the irritability be found to abate after the inhalation of *hydro-carbonate*, the difficulty of swallowing might probably be overcome, and allow of the exhibition of wine and other stimulants to cure the disease. But in the country, the use of this remedy is not to be expected, and, even in this city, a patient might die before an apparatus could be got ready for a trial of it. Other applications, therefore, calculated to produce similar effects, must be sought for; and among these frictions of the body with warm oil, and the use of the powder of *stramonium* leaves, or extract, in doses of two grains, as I formerly recommended,* appear to promise most. The *volatile alkali* is also entitled to attention in this disease. We have the most respectable testimony of the successful exhibition of this remedy in cases of bites of serpents in the East Indies, and there are some facts related of its having cured the disease now under consideration, when applied to the wound, and by internal exhibitions.†

Sunken Nipples.—In the Medical Press, for December 3rd, in a lecture upon the "Management of the Puerperal Woman and her Infant, during the Month," Prof. Bedford has the following practical remarks: "It will sometimes happen that the nipple is quite sunken and flat, so much so that it will be impossible for the child to grasp it in its mouth. The consequence will be, that the mother is fretted and fatigued by the negative efforts of the infant; and this latter will be defrauded of what it has a birthright claim to—its natural nourishment. It is the easiest thing imaginable to remedy the difficulty. Take an ordinary pint bottle with a long neck, fill it with hot water, then pour out the water, and apply the mouth of the bottle immediately over the nipple; as the bottle cools a vacuum is formed, and thus a powerful but equable suction is produced, which results in elongating the nipple. The bottle is then removed, and the child applied."

Cincinnati Lancet and Observer.

experience. A reduced atmosphere, by a number of candles burning in a bed-chamber on the rejoicing night for Lord Howe's victory, procured a physician in this situation a night of repose unexampled for several years, and to his servant, in the same chamber, profound sleep. Other cases corroborated its hypnotic virtues, and might give birth to the proposal of administering it in hydrophobia, where high irritation and consequent watchfulness harrass the patient." Hamilton on Hydrophobia, vol. ii, p. 74.

* Inaugural Dissertation: 1792. Observations, &c.: 1801.

† See Journal de Physique: year 8. The form was common volatile spirits, 12 or 15 drops in a glass of water for a dose.

Pharmaceutical Department.

By THOS. E. JENKINS, Pharmaceutist.

EAU DE VICHY AND ITS ARTIFICIAL PRODUCTION.

The springs which yield this famous mineral water are situated at Vichy, a small town noted for its baths, midway between Clermont and Moulins, in France, and was a favorite place of resort as early as the time of the Cæsars; indeed, these Roman Emperors, annually visiting this spot, esteemed the medicinal qualities of the waters highly, spent much of their time there, and adorned it with luxurious baths, magnificent edifices and spacious promenades.

The great renown gained by these springs at that early period, has been maintained to the present day; and few watering places in the world are more frequented than this.

The curative qualities of its waters, in certain affections, are so well attested, that its reputation has spread over the whole civilized world, and consequently, not only do multitudes of invalids and seekers of pleasure annually visit Vichy, but vast quantities of its waters are exported to foreign parts, much of it coming to our own country.

The constitution of the water of Grand Grille, the most highly esteemed of the seven springs at Vichy, is, according to the analysis of Longchamp, as follows:

Carbonate of Soda, crystalized, - -	13.592
" " Lime, " - - -	0.356
" " Magnesia, " - - -	0.085
" " Iron, " - - -	0.004
Sulphate of Soda, " - - -	1.061
Chloride of Sodium, " - - -	0.580
Water, - - - - - - -	1000.000

Carbonic Acid Gas, not determined.

Since this, other and more elaborate analyses have demonstrated the presence of small quantities of Iodine, Bromine, Phosphoric Acid, Ammonia, Manganese, Strontia, Alumina, Silica and Lithia.

As this is a highly carbonated water, the insoluble carbonates are held in solution by carbonic acid gas. Its medicinal virtues do not depend entirely upon the carbonate of soda, its principal constituent—in which respect it is almost equalled by Bilin, in Germany, and surpassed by Tarasp, in Switzerland; but the comparatively small quantities of the other salts, which are to the carbonate of soda as 1: 2.5, exercise a marked influence on the economy when the use of the water is persisted in.

M. Soubeiran has given a formula for the artificial manufacture of this water, and bases his process upon the analysis of Longchamp. It is as follows:

Carbonate of Soda, crystalized,	10.000 grammes
Chloride of Sodium, "	0.100 "
" " Calcium, "	0.500 "
Sulphate of Soda, "	0.500 "
" " Magnesia, "	0.160 "
Tartrate of Potassa and Iron, cryst.,	0.006 "
Water, - - - - "	625.000 "
Carbonic Acid Gas, - - -	five volumes.

He makes the solution of the salts of the same degree of concentration as they exist in the natural water, and charges it under pressure with five volumes of carbonic acid gas.

Since the demand for Eau de Vichy has sprung up in this country, Prof. Wm. Proctor has given a formula for its preparation, which we think is an improvement on that of Soubeiran, in reducing the French weights to our own standard, and in facilitating the manipulation with the gaseous ingredient. Where one has at his command a fountain of carbonic acid water, it is as follows:

Bicarbonate of Soda, - -	13.50 ozs, Troy
Chloride of Sodium, - - -	15.40 grains
" " Calcium, fused and dry,	36.00 "
Sulphate of Soda, crystalized,	68.50 "
" " Magnesia, "	22.70 "
Tartrate of Iron and Potassa,	00.83 "
Water, - - - - -	two pints
Carbonic Acid Water, - - -	ten "

Prepare twelve pint bottles, with good corks; dissolve the chloride of calcium in six fluid-ounces of water, and set it aside; then dissolve the salts of soda and the salt of iron to-

gether in the remainder of the water, add the epsom salts, and when dissolved, filter; divide this solution equally among the twelve bottles, and then, having added half a fluid-ounce of the solution of chloride of calcium to each, proceed to fill them with carbonic acid water (drawn quickly from the fountain), cork securely, and tie over.

We have been called upon several times to furnish this water, and employed, with great and uniform success, this process; but the formulæ of Prof. Procto needs no recommendation, all pharmaceutists know them to be reliable and practicable.

Vichy water has been employed with success in the treatment of numerous diseases, among which may be especially noticed,*

1. *Gout.* In affections of this character, it is esteemed beneficial on account of the property depending upon its alkaline nature, not only of preventing the formation of arthritic deposits in the joints, but of removing them by dissolution after they have been deposited. Formerly vegetable diet and acidulous drinks were prohibited during the use of Eau de Vichy in gouty affections; but it would appear, in the present state of our knowledge, more reasonable to interdict the employment of nitrogenous food and sour drinks, and recommend a farinaceous diet, or to allow just a sufficiency of nitrogenous aliment to repair the waste of tissue.

2. *Lithiasis.* In cases of fully developed lithic disease, *i. e.*, when stone is already formed in the bladder, little good can be looked for as to the removal of the already formed calculus; but its further growth may be prevented by the judicious use of this water, and in incipient lithiasis, where the calculus is beginning to form, a like treatment may be followed by good results. It must not be expected that this water will be serviceable in the treatment of lithiasis, from every variety of stone, but only where uric acid or the waters predominate; for it would, in all probability, increase the mischief if used where there is a tendency to the formation of phosphatic deposits in the urine. To guard against the injurious effects of alkalies, especially on the kidneys, no more of this urates should be used than is just competent to produce a *slight* alkalinity of

*August Vetter. Vid. Handbuch der speciellen heilquellenlehre.

the urine. This may be watched by testing that fluid every morning and evening with reddened litmus paper, which should barely have its blue color restored.

3. *Catarrh of the Bladder.* If this is owing to contraction of the urethra or to prostatic disease, these causes must be removed, and if the catarrh still continues, Eau de Vichy may be used; but if those affections are mere accidental complications, Vichy may be used at once. If the catarrh is caused by gravel, and the constitution will admit it, Vichy may be used with advantage. In general, after the catarrh is cured, to prevent relapses, chalybeates should be employed, especially with lymphatic and torpid indirionals, those disposed to the developement of mucus. Particular attention should be paid to the condition of the bowels during the administration of Vichy water, for it frequently produces constipation.

4. *Irregularities of Digestion.* It is useful in heart-burn, and oftentimes assists digestion of hearty meals; and is recommended to nursing women whose milk is disposed to sour and disagree with the infant.

5. *Gonorrhea.* It is said to be serviceable in the treatment of this disease. It will, doubtless, assist in the absorption of the resinous and oleaginous remedies so much in vogue in the treatment of this complaint.

6. *As a Bath.* On account of the alkaline nature of this water, it would be admirably suited to cleanse and soften the skin, and promote its healthy action.

GLYCEROLE OF KINO.

Dr. Wm. S. Love, in a communication to the Journal of the Maryland College of Pharmacy, has called attention to a solution of Kino in Glycerine which he has made. He uses one part of the drug to four of the menstruum, and calls it Glycerole of Kino. He esteems it highly, and thinks it may be substituted, with great advantage, for the tincture.

We have prepared some, according to the proportions suggested by him, but would prefer, if it is intended to replace or supercede the unstable and nearly-abandoned tincture, to make it of the same strength as the tincture, which is six drams to eight fluid ounces. Glycerine dissolves Kino with facility, leaving but little residue, affording an intensely red-

colored and viscid liquid, possessing the astringency of its active ingredient in an eminent degree. When mixed with water, this solution deposits a small quantity of a light, slightly-colored flocculent precipitate, which, after settling, leaves a clear, reddish and highly astringent liquid. When mixed with diluted alcohol, no deposit is formed, but a deep red, transparent mixture is the result. Whether this preparation will gradually become gelatinous, and ultimately lose its astringency, is a question of time. Dr. Love says he has kept it for a considerable time without apparent change.

This Glycerole of Kino possesses some advantages over the tincture. First, in being free from alcoholic stimulus, it is more generally applicable in the treatment of forms of disease where stimuli would be contra-indicated. Secondly, it is not incompatible with aqueous solutions containing mucilaginous and albuminous constituents. Thirdly, there is great probability that the Glycerine will serve as a protecting agent along with its solvent power, and prevent alteration of the astringent principle.

On account of the viscous nature of this solution, it will be especially suited as an external, or local application, and practitioners will be able to employ this valuable astringent in a convenient and cleanly form in the treatment of a variety of cases where Kino is particularly serviceable. As an astringent application, or diluted to form an injection, it may be used with benefit even on the most tender and sensitive surfaces, for the glycerine by its soft and soothing nature admirably fits it for such uses.

ON SYRUP OF SQUILL PREPARED WITH DILUTED ALCOHOL.

BY J. S. CONRAD.

It has long been a custom of physicians to prescribe syrup of squill with a carbonate, when the effect of a carbonated alkali is desirable, which cannot be done with our syrup prepared with acetic acid menstruum, without the loss of the acid gas. To the accomplishment of this end I have prepared a formula as follows:

Squill (powdered), - -	two ounces, troy.
Alcohol, - - - - -	three fluid ounces.
Water, - - - -	one pint.
Refined Sugar, - - -	two pounds, troy.

Mix the squill with twice its bulk of coarse washed sand, introduce into a percolator, and place a tin diaphram on the top. Mix the alcohol and water, and displace till twelve ounces are obtained, add the sugar, boil, evaporate two pints, and strain. This syrup has all the virtues of the squill in the same proportions as that by the pharmacopœia, and if well prepared presents the same appearance.

Journal of the Maryland College of Pharmacy.

CORRESPONDENCE.

Sligo, Ky., March 30, 1860.

Messrs. Editors: Much has been written of late on the subject of Diptheria, and another article on the same subject may be considered superfluous; yet in the unsettled state of opinion respecting a disease so fatal in its character, it may not be amiss to give the readers of the Medical News an account of the disease as it occurred in this neighborhood last winter.

The first case that I saw, was a lad about fourteen years old. I was called to see him on the 13th of January. I was told that he had been complaining several days with a bad cold; on that morning he became suddenly much worse, and vomited several times, throwing up a green fluid; his breathing became difficult, and he soon lost the power of speech. I saw him about two o'clock in the evening. He was lying on the bed, his eyes shut, mouth open, tongue swollen and protruded, breathing very hard, skin cool and moist, face and neck considerably swollen, pulse weak, soft, and about a hundred beats to the minute. He was easily aroused, and attempted to get out of bed, but was easily restrained, however, and appeared to understand what was said to him, but did not answer questions. He had a wild, idiotic expression about his eyes. He permitted me to examine his throat carefully; the whole appearance was remarkable; the soft palate, uvula and tonsils were much swollen, and appeared to be thrust forward upon the tongue; the tonsils were in contact and the uvula pressed forward, the extremity pointing to the upper teeth. The whole had a semi-transparent or watery appearance, except the sides of the tonsils, where they were in contact; here

they were covered with a yellowish membrane. The breathing was through the mouth entirely, the tonsils separating or yielding sufficiently to admit the air. There appeared to be but little sensibility of the parts, which enabled me not only to make a thorough examination of the parts, but also to apply a solution of nitrate of silver, which I used (sixteen grains to the ounce), the only difficulty being a disposition which he had to chew everything put into his mouth. I gave cal. 4 gr., Dover's 2 gr. every four hours until he took four portions, and the next morning to have castor oil and spirits turpentine if the bowels were not moved, and as soon as the bowels were moved, to have quinine 4 gr., carb. ammonia 1 gr. every four hours, the solution of nitrate of silver to be applied every four or five hours. The next morning I found him apparently much better; he was sitting up by the fire, and spoke to me when I came into the room, although he could scarcely articulate. So soon as I entered the door, I discovered that the fœtor, which was distinct the day before, was quite offensive. There was a bloody water running from both nostrils, his bowels had acted four times without taking oil, and he had taken three portions quinine and ammonia. He had eaten heartily of rice and milk; there was difficulty in swallowing, but little pain. The fauces had changed much in appearance; all those parts which had the watery, odematous appearance, were now covered with the membrane, which was seen only on the tonsils the day before; the swelling, both internal and external, about the same; gave chlorate potassa 4 grains, and tincture of muriate of iron ten drops every four hours, the nitrate of silver to be applied every eight hours. On the 15th his condition was much the same; the external swelling subsiding around the neck, measured four inches less than before, but the swelling more extended, reaching down to the lower end of the sternum, and half way from the shoulders to the elbows, the membrane covering the fauces, which also covers about half the roof of the mouth, presents a well defined and raised edge. With a spoon handle I detatched it from the roof of the mouth, from which it separated easily and hung like a curtain across the mouth; I then took hold of it with a pair of forceps, and it peeled off entire, showing a perfect mould of the uvula and tonsils. As I had determined to send for

another physician, I had this membrane laid on a piece of paper and put away to show him. The surface which had been covered by this membrane now presented the appearance of raw meat, and blood was oozing from the entire surface—same treatment continued. On the 16th, Dr. James Goslee met me in consultation. The patient much the same; the same surface covered with false membrane, which was easily detached, but came off in fragments, leaving the surface as before, but probably a shade lighter in color. (The membrane that I laid away has become dry and looks like a thick coating of varnish spread upon the paper.) The same treatment continued, and to have a dose of cal. and Dover's powder at night, and a poultice of wheat bran made with a decoction of tobacco, and that, covered with sulphur, applied to the throat, to be taken off if it makes him sick, and applied again as he can bear it. 17th—Rested better last night, the false membrane covering only the tonsils, uvula and margin of the palate, is easily detached and leaves a bleeding surface. That surface which was previously covered with membrane, looks paler than natural, with several red spots, some very small and others larger. The spots have the appearance of ecchymoses. The same treatment to be continued, with half a teaspoonful pulverized guaiacum mixed with a tablespoonful of molasses, to be taken every six hours. The solution of nitrate of silver has been increased in strength to twenty grains to the ounce. 18th—No false membrane. There is a substance which looks like wet tow, held mechanically between the uvula and tonsils, this was easily taken away with the forceps. The breathing, which has been improving for two days, is natural, and the swelling almost entirely gone. The same treatment was kept up, with an occasional dose of calomel; he was also allowed brandy pretty freely, and a generous diet. With a dose of quinine and Dover's powder every night, he continued to improve regularly, and on the 23rd convalescence seemed to be permanently established. I saw him no more until the 28th, when I was called to see his mother. I again examined his throat; there was considerable loss of substance, the tonsils appeared widely separated, and the uvula a mere tubercle on a high and widely-extended arch, all of which, with the back part of the pharynx, was suppurating copiously. I saw him

no more. He died suddenly on the 31st when it was thought he was improving rapidly.

A sister of this patient, about eleven years old, was sick at time I was called to see him. There was but little swelling, and a small patch of false membrane on each tonsil. At my second visit it had covered the tonsils and uvula, but never extended any further. It could not be removed at all. The fœtor and difficulty of breathing were about the same as in the other case until the fourth day, when her breathing became decidedly croupy, and she died on the 17th, which was the fifth day after I saw her. The treatment in this case was the same as the other. excepting the mercurial at the commencement.

I had five other cases in this family, only one of which had any false membrane, and that only covering one tonsil. After the first two cases, I did not use the nitrate of silver, which I now believe does no good.

On the 25th of January I was called, in consultation with Dr. Wheeler, to see three patients, servants of E. T. B., two little girls about five and seven years old, and the other a woman twenty-eight years old. One patient, a young woman, had died in this family a few days before. The two little girls had been sick several days when I was called in, but the woman was just taken the night before. She had the false membrane, the difficulty of breathing, and the fœtor oris. She was given a fluid ounce of Dewee's tincture guaiacum, which produced immediate relief, causing her to spit up a great quantity of thick, tenacious mucous; she was then put upon the chlorate of potassa and muriated tincture of iron, under which treatment she constantly improved. One of the little girls died, the other got well. January 30th, I was called again to see a little child not more than two years old, at the same place, in consultation with Dr. Wheeler. This child was taken the evening before with difficult breathing. She had been vomited and bathed. There were the false membrane and the fœtor. She died the same day with all the symptoms of genuine croup.

I have had many other cases, none of which proved fatal; and I think I have learned something concerning its nature, and of the effect of remedies. Is it a malignant form of scar-

latina? I think not. In all the cases that I have seen, many of which had excessive swelling about the neck, there was no abscess formed in a single case, neither was there ulceration in a single case. The milder cases resemble tonsilitis, and it might not be safe at all times to say whether a particular case is diphtheria or tonsilitis. There is, however, this difference: in tonsilitis we have great sensibility of the parts; the patient cannot bear to have the tonsils touched, while in this disease you may handle them with impunity. In any of the common inflammations of the throat, there is not only difficulty but pain in deglutition. In diphtheria, on the contrary, there is scarcely any pain, even when swallowing is almost impossible. I have seen many cases where disease of the throat was not suspected at all, and in answer to the question, "Is your throat sore," I have been told that, "It is not in the least." On examination I have found extensive inflammation. It is common to see a transparent film stretched like a curtain across the back part of the mouth, which is quite tenacious, which, however, will burst by expectoration, when you most generally see the uvula attached to one tonsil, seemingly held there by a small patch of false membrane. As it regards treatment, I think it well enough to give a few alterative doses of calomel combined with an opiate in the commencement, after which quinine and brandy will be indicated from the general prostration that attends every case; and without being able to give a satisfactory reason, only that I have seen good results from it, I would give ten grains chlorate potassa, or more, with ten drops, or more, of tincture muriate of iron at least every four hours, and in the intervals I would give a fluid dram of Dewee's tincture guaiacum. I have no confidence in the application of caustics to the throat, and from the extreme prostration and typhoid condition of the whole system, no practitioner would think of antiphlogistics. I have not said anything about the locality of the places where it appeared, because the places were so different in every respect, being at some places as diverse from others as can be imagined, so that I cannot believe it depends upon any local cause; but I do believe that it depends upon some epidemic influence, probably meteorological.

I have extended this article much longer than I intended. You may, however, publish just so much of it as you please.

S. C. YAGER.

La Grange, *March* 23*d*, 1860.

Dr. Bemiss—*Dear Sir:* You requested me to give you a report of some cases of Diphtheria that came under my notice. As I took no notes of the cases, I fear I can not give you a very satisfactory account of them, but will do so as well as I can from memory.

In the early part of last month I was called to see a son of Mr. Buchanan, aged eight years, very stout, and up to this time perfectly healthy. He complained of headache, pain in the bowels, which were a little swollen and tender, want of usual appetite, and diarrhœa; in which condition he had been for nearly a week.

The tongue was coated with a white coat, the papillæ prominent and red, pulse 130: volume good, skin *moist*, no soreness of the thoat. I considered the case at that time one of continued fever, and prescribed Dover's powder, acetate of lead, chalk, and mercury, with fomentations to the bowels.

Second day.—Found the bowels improved, pulse same, soreness and considerable swelling of the tonsils and palate, secreting a tough mucus, but no membranous deposit. Treatment as before, with the addition of a solution of chlorate of potass, and a gargle of pepper tea and honey.

Third day.—About the same, except an aggravation of the throat affection. The palate and tonsils were covered with what at first sight seemed an extensive ulcer, but upon closer inspection proved to be a grayish-white membrane, closely adhered to the dark red mucus surface. This membrane when peeled off from its attachment—which was done with difficulty—was found to be nearly as hard, and not unlike the white of a hard boiled egg.

The breath was very offensive, and an acrid, ugly discharge issuing from the nose, like that in scarlet fever.

Prescribed instead of the gargle, sol. nitr. silver (20 grains to the ounce), applied every two hours by means of a mop made of a strip of cotton.

Fourth day.—Pulse about same, bowels quiet, throat *worse*,

the membrane having extended forward upon the palate, and formed a patch on the cheek. Substituted for the sol. nitr. silver, tinct. chlor. of iron and honey, under which application the membrane slipped off the cheek and palate, but remained on the tonsils. I had reason to believe this membrane extended into the larynx, for when washing the throat the patient would sometimes throw out pieces in an effort to cough.

In about this condition—pulse, tongue, and throat—nearly the same each day; the little patient wore along until the 9th day, when he died.

Towards the latter part of the attack, the bowels became again irritable, the diarrhœa returned, with a little blood. The Dover's powders, etc., were resumed—having been laid aside for a while. He was vomited several times when the breathing would become very difficult, but with only temporary benefit.

I am still at a loss to know whether this was a case of typhoid fever—such as had been prevailing to some extent in the neighborhood, complicated with this peculiar sore throat—or a case of simple diphtheria.

I attended two other cases, both of which recovered. One terminated in suppuration, the other without. They were both very ill for about ten days, after which they slowly recovered.

These cases were attended with hot *dry* skin, high fever, coated tongue, sluggish bowels, fetid breath, very sore throat, with a profuse secretion of tenacious mucus, acrid discharge from the nostrils, difficult breathing, etc.

They were treated with purgatives, chlor. pot., counter-irritants, and fomentations, and a solution of argen. nitr. ($\frac{1}{2}$ dram to the ounce), applied by means of a piece of prepared sponge.

I mention this because I believe it far more efficient than the way in which the application was made in the other case. The sponge is soft, and can be pressed *beyond* the tonsils, though the opening be small, thus wiping off the tenacious secretion, and at the same time applying the wash freely to the inflamed parts. I flattered myself that the membrane was prevented from forming in these cases mainly by this means.

Hoping that this—though a long and tedious account—may be tolerably satisfactory, I remain,

Your ob't serv., J. A. DOUGHERTY.

PHYSIOLOGICAL INCEST.

By W. BYRD POWELL, M.D., of Covington, Ky.

Messrs. Editors: By the above title I designate marriage in contravention of physiological law.

The conviction is widely spread and deeply founded in the public mind, that consanguine marriages deteriorate the species by entailing on progeny idiocy, such other crrebral imperfections as occasion insanity, and constitutions so depraved as to readily take on scrofulous forms of disease. And legislatures have assumed this popular opinion to be an established fact; and to arrest the supposed consequences, have prohibited the marriage of parties within certain degrees of consanguinity, But statistics, it is believed, have as yet failed to sustain the popular opinion.

About fifteen years ago I was induced to suspect the existence of a physiological incompatibility between the sexes in relation to progeny, and thus I was induced to adopt an active and careful course of observation of progeny and progenitors, and the result has been an undoubting conviction of the truth of my suspicion. This incompatibility obtains thus: certain of the temperaments are incompatible in relation to progeny. *A priori* this view of the case presents a greater probability than that consanguinity should produce such a result; because temperament is a positive condition, and therefore capable of an agency; but consanguinity is merely a relation, and therefore incapable of agency.

It is true, however, that the evils complained of do sometimes attend consanguine progenitors, and yet the consanguinity was a mere coincidence, but hitherto it has been mistaken for the cause; for when consanguine progenitors possess compatible temperaments, I have uniformly found the progeny to be all right. Uniform coincidence, to my mind, is equivalent to demonstration. But uniformity of results has never attended consanguine marriages, for the progeny of consanguine progenitors are more frequently than otherwise sound and viable. But I have not in fifteen years observed physiologically incompatible progenitors to have sound and viable children, and I am very confident that no instance of the kind can be adduced.

In this connection, I obtained a few weeks since, a very significant fact: Dr. Patterson, superintendent of the Ohio Idiotic Asylum, informs me that he has found but two per cent. of them to be of consanguine progenitors, and that between ninety and a hundred have been brought to the Institution. Now, as it can not be conceded that physiological progenitors, holding to each other a physiological relation, can produce idiots, it may be inquired, whence came the other ninety-eight per cent.? Not having seen their progenitors, I can not answer; but from what I have seen, I infer that their progenitors were physiologically incompatible, and that the consanguinity of the progenitors of the other two was merely a coincident circumstance. To this incompatibility do I attribute all the idiocy, much of the insanity, all of the phthisis, pulmonalis, and mesenterica, and all scrofulous forms of disease without distinction. These melancholy results of this incompatibility, induced me to nominate it physiological incest, and I believe it to be the only incest that nature recognizes.

I adopt with some modification that system of the temperaments which has descended to us from the ancients. That others may have the benefit of this discovery, it is essential that I show my modification of the system alluded to. The description that has been had of the melancholic temperament, is indicative of a pathological condition, and the fact that all the examples or illustrations I have seen of it were pathological subjects, caused me to discard it. Nevertheless, early in my investigations of this subject, I was brought to the conviction that humanity is distinguished by four temperaments; for I frequently met with the indices of what I inferred to be the fourth temperament, in combination with those of the other three. At length, after many years of unceasing observation, I met with an individual whose appearance represented, as I thought, the fourth temperament—as I had seen it dimly shadowed forth in company with the indices of the other temperaments—and I nominated his condition the encephalic temperament. Since this event, I have had thirty years of additional observation and reflection, and nothing has transpired to induce me to doubt the accuracy of my observation, or of my conclusion in the premises. The encephalic temperament is indicated by a relatively large cerebrum, and a small

cerebellum, and hence, a feeble and tardy manifestation of all the functions incidental to life. The presence of this temperament in combination with either or all of the others, is readily detected by the fact that it occasions a considerable fullness and expansion of the superior third of the forehead. I think it best to remark, further, that I hold the sanguine and bilious temperaments were originally founded in the constitution of the race, and that it is upon them that depends the transmission of life, and the perpetuity of the race.

The lymphatic, and encephalic, I hold to be adjunctive in their character, and to have resulted from influences incidental to civilization. I am now prepared to expose the apparent cause of physiological incest:

1. All persons are incompatible with those of their own temperament.

2. When the lymphatic or encephalic temperament shall constitute a part of the constitution of each progenitor, the alliance will be incestuous.

3. In all marriages with a view to, or expectation of progeny, one of the parties must be exclusively sanguine, bilious, or sanguine-bilious, and the other should be more or less lymphalic, or encephalic, or even both combined with the sanguine, bilious, or sanguine-bilious.

4. When both progenitors shall be of the sanguine-encephalic temperament, the progeny will die young of hydrocephalus, or tubercular meningitis.

5. When both progenitors are of the bilious-encephalic temperament, the progeny will be idiotic, or rachitic, or die young of tubercular meningitis.

6. When both progenitors are sanguine-bilious-lymphatic in temperament, the progeny will die young of tubercular forms of disease, or phthisis, and tabes mesenterica.

7. When one party is sanguine-bilious-lymphatic, and the other party is sanguine-bilious-encephalic, the progeny will die as under the 6th law.

8. When both progenitors are of the bilious-encephalo-lymphatic temperament, the progeny, in the proportion of 5 to 7, or 9 to 11, will be dead-born.

9. When one progenitor is bilious-encephalic and the other is sanguine-encephalic, the progeny will, sooner or later, manifest insanity.

10. When both progenitors are so nearly of the same temperament that observation can not determine a difference, there will result no progeny.

I have not, for the want of time and opportunity, been able to observe all of the marriage alliances that might be found amongst the temperaments, but the preceding laws have been deduced from an immense number of observations made during a period of fifteen years. And yet some of them may require further observation to establish them, but laws 2, 3, 6, and 8, I think to be uniform, and that to them no exceptions will be observed.

I believe that I can invariably distinguish at sight incestuous progenitors, and if they obtain under any of the conditions of the laws named, I can predict the consequences to their progeny; and law 2, will determine the legality of ninety-nine per cent. of our marriages.

Now, Messrs. Editors, if you entertain any suspicion that is a theory, you do me injustice; for I never have had a theory on any subject, and never adopted one from any one else. I am only guilty of drawing inferences from carefully observed facts; and if you have been much engaged in medical practice, your memory, I doubt not, can furnish you many illustrations of the truth of this discovery. Before making this discovery, and whilst engaged in practice, I observed whole families of children to die of scrofulous forms of disease, and yet the progenitors were sound, and contra-indicated any scrofulous taint of constitution. At the time of treating these cases I could not divine their cause, but now I remember that the progenitors were incestuous. That you have observed similar cases I can not doubt.

Those physicians to whom I have communicated this discovery, have, by their own observation, become convinced of its truth. One of these physicians is not unknown to the profession, viz: E. H. Dixon, editor of the New York Scalpel. In the January number of his Scalpel for 1859, he makes known his conviction of the truth of this discovery, and also his conception of its importance.

Up to a recent date my observations in this relation were exceedingly extensive. They were to a great extent arrested four years ago by hemiplegia of my left side. My conception

of the importance, and my condition, make me anxious to get this discovery fixed in the public mind; for the mischief that is now resulting from this incest is incalculable. I have nearly ceased to entertain a doubt that if emigration to our old States were to cease, this incest would depopulate them in two hundred years. Furthermore, unless Southern slave-holders learn to guide the reproductive function of their slaves, this incest will wind up the slave institution. It is even now a waste of money in some portions of this State, if not in all of it, to invest it in negroes under the age of twenty-five or thirty years.

Much of the mischief that incest produces is occult when progenitors are but moderately incestuous; their incest will not become manifest in the progeny by open forms of disease, but by a reduction of their viability, so that they fall by the assault of some ordinary form of disease. During the last five years this subject has commanded my attention in reference to its influence on longevity: by inquiries made of old people, those of eighty and ninety years, I have uniformly found that their progenitors, and grand-progenitors, were physiologically legal marriages. From data of this kind I infer, that if all marriages could be rendered legal for three generations, the average of human longevity would be doubled. That is, it would be extended to eighty or ninety years.

It will be a long time before society will be much benefitted by this discovery, because the experiments are not in general sufficiently understood. The subject of the temperaments was introduced to our profession a little more than two thousand years ago, and yet, through all this time, this incest continued concealed, to work out the destruction of our race to an unknown extent. And if its discovery be not established during the time I am permitted to labor for it, it will probably be lost, and then two thousand more years will be required for its re-discovery; because two thousand years will scarcely produce more than one man so constituted as to devote thirty-seven years to its investigation, as I have done (I mean the temperaments). And this accounts for my discovery of this incest. I apply the temperaments to all types of the race, and to the denuded crania of all, and with about equal facility. If all the members of our profession were practically acquaint-

ed with the temperaments, our young people would be under no necessity of living single, or hazarding an incestuous marriage, for all could be guided by their respective physicians. Young people are now sending me their daguerreotypes from the remotest districts of our country, to be informed in relation to their physiological compatibility.

ST. LOUIS CORRESPONDENCE.

NUMBER III.

MESSRS. EDITORS: I was well pleased with the article of T. E. Jenkins, on "Palatable Medicines," published in the December No. of your journal, *par excellence*. It is worthy of being read and treasured by every member of our profession.

Homeopathy has made an advance only in this part of our art, and by it has gained a wonderful popularity in many of our large cities. It cannot be doubted that an improvement in the mode of preparing medicines, is a desideratum, at present, among regular or scientific physicians. Indeed, to remove the extreme disgust in the public mind against our nauseous remedies, is an important duty we owe to community, as well as to ourselves. Homeopathic medicines are palatable, and so insignificant in appearance, that the impression has gone abroad that they do no injury if they do no good. These apparent unimportant items have raised the system to its present position, and has done more for it than all its *mystic* charms. Under this deceptive covert, homeopathy wields our weapons in the cure of disease. True, homeopathy has less to recommend it than most other forms of quackery, yet these little sugar globules have wrought a most astonishing popularity for this system. The botanic with his hot vapors, the hydropath with his wet sheets, and the falsely named allopath with his unwelcome physics and vomits, are thrown aside, while the little pellets become the panacea of every ill.

The system vaunts, professedly, two dazzling principles, neither of which has any foundation in truth. The first is, that infinitessimal attenuations develope power, and secondly, that "like cures like," or the doctrine of "similii, similibus, curantur."

Homeopathy is a *public lie*, flattering the world that it is a harmless system, and at the same time uses more frequently, and in larger doses, the most virulent poisons than the regular profession.

The system arose about the year 1790, out of the idea that the efficacy of remedies was augmented in a direct ratio with their attenuation and trituration; thus a decillionth of an atom of charcoal was an authorized and powerful remedy. This degree of attenuation itself is a physical impossibility, and if, indeed, it were capable of being accomplished, it is an insult to human reason to suppose that such an infinitessimally small quantity of a neutral body could exert any influence in diseased action in the organism. Out of this most ridiculous position arose the no less absurd doctrine, that a spiritual power was developed. Hahneman, Lutze, and many of their followers thus taught. It is stated by one as follows: "Give as little medicine as possible; the minimum is the most efficacious; it is the spirit that cureth, and spirit is not to be measured in value by the amount of the body that contains it. A violent remedy for a human body is like a violent remedy for a political body. It is a revolution, a convulsion; and as political experience has proved the one to be ineffective, so human experience has found that the violent allopathic medicines of the common drug shops are insufficient to diminishing the amount of human suffering. In both cases a more spiritual, deep, and recondite remedy is indispensable." Here is unabashed fanaticism and religious superstition.

A writer in the Homeopathic Medical Examiner, says: "Every homeopathist will agree that the dose *must be large enough* to produce the required effect; more than this is at least unnecessary, and may be injurious. What is a suitable dose must be left to the enlightened judgment and experience of the practitioner." The Western Homeopathic Journal, published in this city, says: "Quinine and morphine must be used in sufficient quantities to produce the desired effect." Where, now, are their infinitessimal attenuations?

Hippocrates said, "contraries are the remedies of contraries," and as followers of Hippocrates, we are falsely named *allopaths*, while homeopaths are thus named because they teach that "similars are the remedies of similars," though the doc-

trine was not original with them. Homeopaths practice on the former of these principles, while they teach the latter. In the Western Homeopathic Journal, T. G. Comstock, H.D. reports cases of diphtheria treated by himself in this city with belladonna, the iodide, the proto-iodide, the deuto-iodide of mercury, aconite and syrup of ipecac, etc. It will appear evident to all who examine the subject, that homeopathy has departed essentially from her original principles: they practice now very much as regular physicians do, giving "china," which is the same as our cinchona, stibium, which is the oxyde of antimony, and mercurius solubilis, which is the black oxyde of mercury, and thus through the vocabulary. Their knavery consists, not in giving wrong medicines, or in neglecting to give right medicines, so much as in professing to the public that *we kill* with these remedies, while they give harmless little pills.

Dr. E. H. Parker, of New York, has shown by carefully executed analysis performed by Dr. Asthur Du Berceau, the skillful analytic chemist, that many Homeopathic medicines are stronger than our own. The first analysis was of mercurius solubilis and of arsenicum, obtained from the case of a homeopath physician; the former contained in 100 parts 11.00 parts of metallic mercury, and the latter 1.112 of arsenious acid. The second was of medicines obtained from a case of family remedies: in 100 parts of mercurius solubilis there were only 1.350 of metallic mercury, in arsenicum there were 1.120 of arsenious acid. It will be observed that in the first analyses of medicines used by the physician, was as 11 to 1 of those in family use, while the arsenious acid was nearly the same in each. Other analyses were made, but these are the favorite remedies in use. We are not at a loss to understand the reason. The same writer makes the following very just remarks: "In their progress from infinitessimals to large doses, it has been necessary for them to conceal the change in their medicines, and therefore they have studied the art of giving medicines in the most agreeable or in the least offensive form, and in this respect we can learn something from homeopathy. The old school of practitioners, who, when called to a patient's house, seemed to make it their first duty to fill it with eight-

ounce vials, have not entirely passed away, neither have their abominably tasting compounds entirely disappeared. Their bottles, their tablespoonful doses, their nauseous mixtures, have driven, and still do drive, family after family to homeopaths, simply because it is not human nature to desire to drink such mixtures as tincture of aloes and asafœtida with castor oil and turpentine, in equal parts, a wine-glassful at a time, if almost tasteless water or a sweet powder will accomplish the same good. To doctors, even, when they fall sick, an agreeable draught is preferable to one, the very thoughts of which stirs them to their very lowest depths. It is not necessary to point out the mode in which concentrated tinctures can be made to supply the place of less powerful preparations, neither is it necessary to do more than hint at the frequent desirableness of giving small doses often, rather than a single large draught. A few drops aconite tincture in water is vastly pleasanter than even spirits mindereri or spirits nit., dulcis. The dose of Norwood's veratrum viride is much pleasanter than infusion or even tincture of digitalis."

This is the only advantage homeopathy possesses. It is apparently rife in our city at the present time. They have a Homeopathic Medical College of Missouri, which was inaugurated last fall, with a full Board of Trustees and seven Professors. During the past session, now ended, the "announcement" shows twenty-one matriculants, five of whom were graduated. They have under their control, also, a hospital, known as the Protestant Hospital. They wisely conceal the true character of this institution. Like the college, it is a small affair, and promises no very auspicious future. The attending physician, formerly a *regular*, says: "In intermittent fever our remedies were usually arsenicum, china, chinoide, ipecac, nux vomica and veratrum," etc.

There is also a medical journal published in our city, styled The Western Journal of Homeopathy, edited by E. C. Franklin, H.D. The No. before me contains sixteen pages of very poor matter, and if it is a fair specimen of its future character, it promises no very brilliant career. The editor, like his offspring, seems to be a very small specimen. He announced in one of our daily papers what would not have been imagined had he not announced it, that he studied under the celebrated

Valentine Mott. He does neither credit to his tutor, nor to his own honor, in making use of the name of this honored member of our profession for the advancement of his own pecuniary interest. In a late discussion in one of our city papers, regarding homeopathy, the above named would-be editor was totally annihilated by the herculean pen of Prof. Linton.

So much for homeopathy—and I trust my remarks on this infinitessimally small subject may not be without benefit to your readers. In my next letter I will make a few jottings in regard to the regular profession.

I remain, as ever, STRAIGHT.

Messrs. Editors: I find it a custom, among midwives and monthly nurses, to wash the newly born infant with soap and water, and am told that the practice is recommended to them by physicians. It has often occurred to me to find the child treated in this manner before my attention could be spared from the mother. I believe this treatment of the child is often the cause of death, as I think I have observed in more than one instance. The soap reddens and inflames the skin, and produces excoriations at the axilla, groin, and between the nates. This terrible irritation of the whole cutaneous surface must be a severe ordeal to the excitable nervous system of the infant, and, I am convinced, is the cause of fatal convulsions. The mortality of infants within the first month after birth, implies mismanagement of some kind, which may be obviated by attention to several little hygienic principles, among which this may be important. ANON.

FROM OUR GOSSIPING CORRESPONDENT.

My Dear Senior Editor: Your very kind letter, requesting me to write oftener for the News, has such a winning way about it—a way as winning almost as the smiles of one's lady-love—that I am induced just this once to yield, hoping that no serious results will follow, that no boring—artesian well-like—will ensue.

I was just thinking, doctor, that many, many years ago, you and I, after sundry terrible throes on the part of alma mater, were thrust into professional life together. I was thinking of

the parting supper at the Alhambra, and while thus engaged there came dancing before my vision two personages, both advanced in years. The first appeared astride a black horse, his head inclined somewhat to the right, his cap (a heavy fur one) pulled down around his ears, and his pantaloons in some unaccountable way failing to reach the tops of his boot-legs. Suddenly halting, he disappeared, and in a few moments thereafter was seen astride, not of his horse, but his favorite hobbies, namely, blood-letting and the great sympathetic. Now a contest takes place between applauding students and an enthusiastic professor; thump, thump go the canes, and louder, louder screams the professor, until at last scarcely a word is heard, and about all there is to satisfy the student, he is attending a medical lecture—is a tall, slim figure before him. violently gesticulating, and rapidly moving his lower jaw, At last the gong sounds, students scamper, and Professor No. 2 appears: a smiling old gentleman he is, too, with thin, gray hair and snow-white beard, a black swallow-tailed coat is buttoned tightly across his breast, and his ears rest upon a well-starched, angular shirt collar. Soon becoming excited with his subject, he runs rapidly around the little arena, spurting saliva upon all in the neighborhood, and exclaims, with his broad Scottish accent, "I show you here just now, gentlemen, that most impawtant awgan." Such are a few of the impressions left on my mind of two eccentric, but distinguished, professors. And who can forget another, the one who was so frequently called in consultation to the neighboring State of New Jersey; and still another, more eminent than all, one who then had, and still has, a world-wide reputation as a daring and intrepid surgeon. But all this, though reviving pleasant recollections in your mind, may appear very insipid to others, and yet what can I say better. An imaginary surgical case, full of blood and horrors, might be pictured for greenhorns to gape at—though I by no means wish to insinuate that you have such readers—or I might, like the brilliant Dr. Doubleton, of an adjoining State, "soar aloft on eagle's wings," try to emulate the character of the lamented Drake, and, as a reward, only get my feathers clipped by the hands of such a man as D. Meredith Reese; or I might thrust Dame Nature to one side, slide gently into her shoes, and then,

like numerous drug-givers, even in this enlightened day, boast of wonderful cures performed—of cases wonderful only because they recovered in spite of the doctor; or I might talk of medical politics, of John Brown, of Gov. Wise, of the City Council of Richmond, or of certain silly, seceding medical students; or I might strike out upon the field of medical ethics—might ask how much less a violation of "the Code" it would be for the dean of a medical college to offer instruction gratuitously to dissatisfied matriculants of another college, than it would be for me, an humble physician, with a reputation only local, to offer my services free of charge to a discontented patient of one of my brethren; or I might give you a punch under the ribs—not of that delicious kind which Guthrie furnished three hundred dry delegates, and the formula for which would be worth at least a year's subscription to the News—but one about the meagreness of the editorial department in a few of your last numbers, that being always to me, by far, the most interesting portion of a medical journal. None of these things, however, do I propose doing, as it only now suits my convenience to give a gossiping letter; and as to whether it is published, or not, is a matter of perfect indifference to me, age and wrinkles having long since displaced whatever of ambition I might have had in that way. Well, after having $30 required of me for a sheepskin, a peculiar fleecing operation now practiced upon a large scale by some medical colleges upon over-anxious aspirants for the honors of the doctorate, in which diplomas and students are both oftentimes—*sold*, I sought the West in search of "a location," and finally selected, as my future home, an isolated but populous town, in the northern part of the great Sucker State. On one of the hottest days in August I arrived there, soon selected an office, had a modest card inserted in the newspapers, and displayed to the best advantage a large tin "shingle," ornamented by a picture, in gilt, of a large mortar and pestle. This, you must remember, was long before the issue of Sir J. Forbes' Nature and Art in Disease, long before the evils of polypharmacy were depicted, long before there were such conservative writers as Bennett, Bigelow, Flint, Speed or "Straight"; at a time, in fact, when physic-giving was the fashion. Among the physicians of the town were Drs. Pompous, Bluster and

Sly, to the former of whom I had a letter of introduction, and who was emphatically *the* surgeon of that locality. Offers of kindness were proffered by all these gentlemen, for which, in my verdancy, I felt exceedingly obliged, as my entire earthly possessions at that time consisted of a few medicines, a slender collection of medical books, surgical instruments worth perhaps $40, horse flesh worth $40 more, and $15 in cash. Dr. Sly was almost overwhelming with his demonstrations of friendship, and on several occasions was heard to remark that he was much pleased with me, that my opportunities had been very fine indeed, and that after a few years experience I would, in all probability, make an accomplished physician, which kind of "faint praise," it can readily be seen, was calculated to seriously damage, if not "damn," whatever prospect there might have been for an immediate supply of provender. Another strong instance of the attachment manifested by the Dr., was the frequency with which he invited me to ride with him to see his patients, at which times, however, I was generally graciously permitted to hold his horse. Sly was a great genius in his way, was perfectly familiar with all the tricks of the trade—for medicine was with him a trade—and if he failed in getting the largest obstetrical business in the vicinity, it was not for the want of effort, for no sooner did he hear of a female's abdomen becoming enlarged, than he would, accidentally of course, drop in, in a neighborly way, to have a chat, during the course of which he was careful not to neglect to mention the number of women he had "put to bed" within the year, and the extraordinary success attending his practice in that particular branch; and it was not uncommon, if the person complained of the usual sickening sensation in the epigastric region, for him to advise as a remedy charcoal *dissolved* in water, a feat in chemistry, it must be confessed, rather difficult of accomplishment. I once ventured to ask advice of Sly in reference to the best course to be pursued for early success in practice, whereupon he placed his lips to my ear and gently whispered, "join church," and that he was honest in the advice given, was demonstrated by the fact, which I afterwards ascertained, that he had himself been a member of four different denominations within as many years. He, in one respect, was like Doubleton, heretofore alluded to,

ambitious of eagles' wings—golden ones, though—for prayers the loudest, and temperance demonstrations the strongest, were frequently made in public, like so many investments in stock for ultimate profit; while in private, a little oath, or a little "otard," seemed to him the greatest of luxuries. Whether this double-faced acting caused a peculiar way Sly had of laughing, or not, I never ascertained, but his was a laugh never to be forgotten, it was all on one side of the body, one cheek only responded to the effort, the other being as if the victim of paralysis, as if the motor nerve leading to it had been cut—an accident which, by the way, it was said, really resulted from the only surgical operation he ever attempted, that of cutting out a scrofulous gland near the ear.

But I fear this tattling may prove tedious, and will, therefore, pass on to Bluster. Of his early history I know but little. I was informed that he entered college, fought a sham duel, was made to believe he killed his man, ran off, and not knowing what else to do (indeed, being fit for little else), studied physic. When I first knew him he was a plain, unassuming, modest bachelor, with rather small calibre, and afflicted with both love and religion, much of the former, little of the latter. His dulcinea del "Suckerdom" possessed a considerable amount of beauty, with a diminutive quantity of brains, and once, when about starting upon a visit to a distant State, was addressed by Bluster thus: "You are going, fair one, to make a long and tiresome journey, and what you see, and hear, and experience, will, no doubt, be sufficiently interesting to cause from you a lengthy diary." With suppressed emotion she turned to him, took him affectionately by the hand, and with much griping replied, "there haint a bit of danger, Doc., for I have plenty of medicine along." He at one time became almost demented, many thought, upon the subject of religion, a few upon the subject of love, but a careful observer could not have failed to notice that there was method in his madness—some said it was Methodism—but whatever it was, he soon changed his Church creed, assumed a swaggering manner, met with some success in practice, and acting upon the idea that every strut brought a patient, swelled up almost into bursting; indeed, he really flattered himself into the belief that he was a man of parts—he was,

too, in the gluteal regions—and receiving as he did, about this time, a proposal from Sly, they joined hands, and I have never known a more striking instance of success by the tricks mentioned than that afforded by the firm of Sly & Bluster.

Pompous was a tall, lank, long-legged, bony, thin-skinned, hatchet-faced individual, with a very small head and extremely long neck; he generally rode an exceedingly rough trotting horse, and prided himself upon the immense size of his pill-bags. Seen at a distance, on horseback, with a closely-fitting cloth cap, which he frequently wore, his head turning constantly from side to side so that he might see who were observing him, and the ends of his huge saddle-bags flapping like a great pair of wings, he appeared not unlike a tremendous bird of prey—just here a wag at my side interrupted me by suggesting that perhaps he was ——. The aforesaid pill-bags were always kept conspicuously in view, no matter what the nature of the case to which the owner thereof was called, whether it was surgical, obstetrical, or otherwise; in fact they were a kind of advertising medium, and told about as plainly as words could have done, that the person astride of them was a doctor, and that the capacity of one was an index of the capacity of the other. I well remember that, on the Fourth of July, a poor fellow had both arms blown off by the premature discharge of a cannon, and the sight of Pompous hastening to the scene, on foot, lugging those everlasting, hypertrophied pill-bags, caused such a feeling of disgust in me, that I have never owned a pair from that day to this. One of the plans resorted to by Pompous to make an impression was, always to exaggerate the danger of his patients, so that if recovery should happen, the benefit to him would be all the greater. A single instance will serve as an example. A countryman one day happened to get caught between a couple of logs, by which he was nipped, not in the bud, but in the belly, and as usual on such occasion, a half-dozen physicians were sent for, myself among the number. P. having arrived first, the case of course was his, and all I could do was quietly to enter the room and mingle with the crowd. The Dr. made a lengthy, and, to me, tiresome investigation, but having at last satisfied himself as to the extent of injuries inflicted, arose from his seat, inserted his thumbs in the arm-holes of his vest,

strode across the room, and in the most grandiloquent style announced to the wondering spectators, that it was a case of "concussion of the pneumogastric nerve." It is scarcely necessary to add that the patient was discharged in a few days—*cured.*

I have thus, my dear Dr., in a very rough kind of manner, noticed a few of the ways of getting into practice—ways not to be imitated, but avoided—and as this letter has already grown too long, I will close by expressing the hope, that no reader will be sufficiently foolish to exclaim, in regard to either of the characters described, "that means me."

SQUILLS.

PROGRESS OF DENTAL SCIENCE.

By J. A. McCLELLAND, Dentist.

SECONDARY ALVEOLAR HEMORRHAGE.

Mrs. M——, aged 35 years, of full habit, and sanguine temperament, called at my office on Sunday, March 18th, to have the first left inferior molar tooth extracted. It had been aching for several days from exposed and inflamed gum; the gums about all the teeth were red and inflamed from the presence of tartar, and, as is usual in such cases, bled freely when lanced; the tooth was easy of extraction, and the bleeding was not sufficient at the time to require the use of any styptic, though, as the patient afterwards informed me, it continued to bleed slowly for four or five hours, when it ceased entirely. On the following Thursday night, the gum bled slightly for about an hour, and ceased without any remedy being used. The hemorrhage recurred again on Saturday morning before daylight (six days after the tooth was extracted), and the patient stated that, on awakening about seven o'clock, the bed was wet with blood—she thinks it must have bled "half a gallon." The bleeding checked a little for a time, but when she called to see me, at ten o'clock A. M., the blood was flowing almost as freely as when the tooth was first extracted, with no disposition to coagulate. There was evi-

dence of considerable loss of blood; the patient was weak and pale, and complained of occasional chilly sensations. The bleeding was checked without difficulty, and at once, by the use of tincture sesqui-chloride of iron. A little cotton saturated with the solution, was forced down into the socket of each fang, and directed to be left until it should be removed by the process of nature. The patient was subject to cutaneous eruptions, and had recently been afflicted with ringworm over the face, neck and shoulders, for which she had been taking, for two weeks previous to having the tooth extracted, cream of tartar and sulphur in half teaspoonful doses every morning, and pulverized wild cherry and dogwood bark, in about the same quantity, on going to bed. The use of the cream of tartar and sulphur was directed to be discontinued, and the barks to be taken until she recovered her usual strength. No further hemorrhage occurred. Except in extreme cases, it is not necessary to leave any thing in the socket of the tooth, but merely carry the cotton, wet with the tincture, to the bottom of the socket and withdraw it again, when the bleeding will cease.

REMARKABLE CASE OF SWALLOWING A SET OF ARTIFICIAL TEETH.

The following case is reported in the March No. of the Dental Cosmos, by M. Whillden Foster:

A gentleman of Wilmington, Del., thirty-five years of age, sanguine temperament, swallowed his artificial teeth at midnight on Wednesday. Physicians were called in, who fished for them, also tried the usual remedies, but all to no purpose; it was then concluded to let nature take her course (not doubting in the least that *her* course would be *death* to him), when, to the astonishment of all, and his most unbounded delight, after a very painful and laborious stool, he found himself again in the possession of them. This did not take place until the following Monday, making the *round trip* in five days. They were on gold plate, quite heavy, made eleven years ago. He remarked to me that he has not slept with them in his mouth since the catastrophe.

(A cut accompanying the report, represents the plate as supporting *three incisor teeth*, and its exact size to be *one inch and five-eights long*, with a broad *hook-shaped clasp at each end*, and its greatest width, *seven-eighths of an inch*.)

Editorial Department.

We have received several communications on the subject of the Langer controversy. From one (which, as a whole, was not intended for publication) the highly reputable author will permit us to make the following extract:

"I am happy to say that the attack of this County Society upon Dr. Langer—even before any reply was made to it—produced in the minds of eminent medical men, in New York and elsewhere, the impression that it was a case of medical persecution.

"I desire to call your attention to one feature of this case. However the Society may now attempt to change the issue, the principal ground of his expulsion was this practice of his; not the manner of employing the Cephalic Version, but the employing it all, before the Article of Labor. This practice is certainly sustained by Cazeaux and numerous other authors. Now, may it not be questioned whether a medical society has the right to expel a member for any practice sanctioned by even a minority of authorities? Why, there is a period in the history of every improvement in medicine, involving either nicety of diagnosis or boldness of treatment, when such improved practice is sustained only by a minority of authorities.

"Again, Dr. Langer was appointed to read a paper before the American Medical Association, at New Haven. The Association adopted a by-law at its last meeting, that no person should be heard by them in the future that was under discipline by a State or County Society. We may suppose that the American Association may sanction the practice in question. Is there no appeal for Dr. Langer? The Scott County Society professes to be governed by the Code established by the American Association. Ought not this National Association to be a Court of Appeals for just such cases as I have supposed?"

Another is from Dr. Brandeis, of this city, who was a fellow-student with Dr. Langer, and whose testimony is well entitled to be heard.

"MESSRS. EDITORS: Finding from several of our medical journals, that Dr. Langer's case gives rise to a display of the most opposite views, as an old school-mate of his, and being thoroughly acquainted with his early career, I consider myself in duty bound to make the following statement:

"Dr. Langer received his early education in Pesth, the capitol of Hungary, and arrived at Vienna in the fall of 1842, where he attended clinical lectures and hospital practice up to 1846. He was at all times a diligent and hard-working student, showing always a particular predilection for surgery, obstetrics and opthalmology. He was always distinguished as one of the first in our class. He graduated in 1845 as Doctor of Medicine and Surgery, and Magister of Obstetrics, and received with the degrees, all the honors connected with them. He then left for his native country (Hungary), where he, able as he was, immediately took an eminent stand as a practitioner till the outbreak of the revolution in 1845, when he received an appointment as a surgeon in the Hungarian army; as such he filled one of the highest offices on the list. The army being defeated in 1850, he was compelled to leave his country, where, though young in years, he was loved by many, and highly esteemed by all who knew him.

"Though Dr. Langer has found some very able defenders, others again, not less able, condemn him. I should feel highly gratified if my humble remarks should serve to create a more favorable opinion in regard to my poor friend, who, from all I can learn, has only practiced in accordance with the precepts inculcated by our former tutors.

"Yours, etc., S. BRANDEIS, M.D."

The approaching meeting of the Medical Association is looked to with great interest by the members of our profession in all sections of the country. New and more exciting subjects of controversy are, it is surmised, to be added to the one which has already been referred from each meeting to the succeeding, until a decision of some sort will now be impa-

tiently demanded. We allude, in this latter clause, to the proposed enactments in regard to Reforms in Medical Education. These will, in all probability, not go beyond an extremely expectant prescription, namely, to await the development of new symptoms before any decisive action in regard to the "sick man."

But the subject whose introduction is most apprehended, and at the same time most to be deprecated by those who feel real interest in the perpetuity and prosperity of our annual conventions, is that sectional question which has so unhappily become a disturbing element in many other national conventions. It is supposed by many that investigations will be demanded in reference to the improper influences which are alleged to have been exercised over the seceding students by faculties of Southern schools, and that these investigations will constitute the entering wedge for the discussion of a topic so absurdly incongruous to an assemblage whose prime object is the promotion of science. We have, however, but few fears that the question will be admitted in any form, or under any pretext; but if some members of the convention should succeed in forcing upon that body such a distasteful subject, we can assure our Southern readers that its discussion will be rigorously confined to the hours set apart for deliberative proceedings. We have received many private letters from our brethren of New Haven, and from their tenor, and our personal knowledge of the writers, we are satisfied that we hazard nothing in the prediction, that the approaching association will, in its social features, be as delightful as any preceding meeting, and that all who visit the beautiful "City of Elms," on that occasion, will long have cause to remember the hospitalities of her citizens.

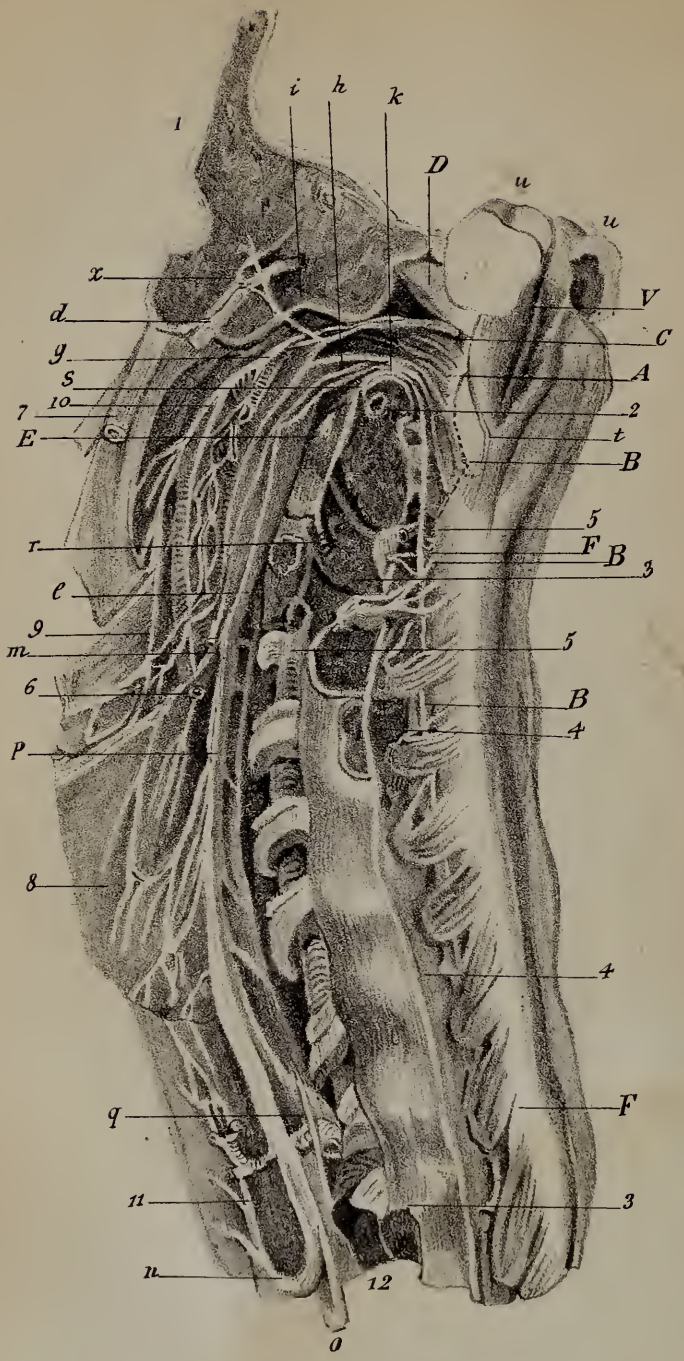
The Dentists of Kentucky are called to meet in Convention, at Lexington, on the 21st inst., in view of organizing a State Dental Society. It is hoped that as many of the profession as can, will be present.

"*Presented to* Dr. Benson, *by his little Patients at the Orphan Asylum.*"

We acknowledge with great satisfaction, the receipt of a beautiful basket of artificial flowers, made by the little children at the Protestant Episcopal Orphan Asylum. It is very seldom in these degenerate days of dollar-worship, these days in which the physician and the scullion are alike employed, retained, discharged and paid at pleasure, that he receives a mark of gratitude unmeasured by market rules, and more seldom still that he receives such evidences of heart-feeling from fatherless children and orphans. But the current of professional life is not always impetuous, nor are its banks entirely free from verdure. At times we would rest a while, and gaze upon the beauties of the scene and listen to the "God-speed" of fellow travelers. This, however, is not permitted, for, from the first until the final breath, whatever be the interim, sleeping or awake, busy or idling, in sickness or in health, in idiocy or intellectuality, time rolls on remorselessly the same, and the ultimate issue alike in all is death. And yet how different seem, and are, the streamlets flowing to the common goal.

Some run their course through sterile plains, rocky steeps, and sombre passes, muttering as they go, and going, mutter suddenly to the end. Others wend their way through fertile fields, adorned with fruits and flowers, and pass in quiet to their peaceful rest. The greater number still, belong not exclusively to either; but, in turn, to each, and greatly dependent on the traveler himself, will the joyous or the sad preponderate. Such incidents as we now record are beacon lights on the path of duty, pearls in the ocean of life, jewels in the sands of time. We know not whether the garland of red, and the scattered white roses and verbena, and the wreaths of honeysuckle, were arranged for beauty, for the language they imply, or for both; but this we do know, that in full appreciation of the one and the other, we say to the little donors, it is well for you that your lots have been cast in such pleasant places, and that you are under the guidance of those who point you upward, and in teaching you your duty to your God, neglect not to inspire you with such sweet principles as have found their manifestation in the beautiful gift you have bestowed.

Fig. XIII.



SPINAL ACCESSORY NERVE OF WILLIS.

Hart & Mapother Lith. Louisville, Ky.

PNEUMOGASTRIC AND SPINAL NERVES IN MAN.

Fig. XIII.

The specimen has been dissected so as to bring into view the origins and anastomoses of these nerves.

A.—Fascicle of the origin of the Pneumogastric.

B.—Originary filaments of the large medullary portion of the Spinal, which forms the external branch of that nerve *r.*; these filaments extend from the first to the fifth cervical pair.

B.—Originary filaments of the bulbar portion of the Spinal, which contributes to the formation of the internal branches of this nerve.

K, C.—Origin of the Glosso-Pharyngeal.

D.—Trunks of the Facial and Acoustic, united after their origin (seventh pair).

E.—Section of the great Hypoglossal nerve.

F, F.—Posterior roots of the Rachidian cervical pair.

g.—Ganglion of the Glosso-Pharyngeal nerve.

h.—Jugular ganglion of the Pneumogastric.

i.—Auricular branch of the Pneumogastric.

k.—Internal branch of the Spinal.

l.—Plueryngial branch of the Pneumogastric, coming from the internal branch of the Spinal.

m.—Superior Laryngial nerve.

n.—Inferior Laryngial or Recurrent nerve.

o.—Divided trunk of the Pneumogastric nerve.

p.—Superior cervical Ganglion.

q.—Inferior cervical Ganglion.

r.—Divided branch of the external Spinal.

s.—Anastomosis of Willis between the Pneumogastric and the external branch of the Spinal.

t.—*Calamus Scriptorious.*

u, u.—Peduncles of the Cerebellum divided.

v.—Floor of the fourth Ventricle.

x.—*Chorda Tympani.*

1.—Section of the Petrous portion of the Temporal Bone.

2.—Section of the Basilar portion of the Occipital Bone.

3, 3.—Cervical Vertebræ.

4, 4.—*Dura Mater.*

5, 5.—Vertebral Artery.

6, 6.—Carotid Artery.

7.—Section of the fascicle of the Styloid Muscles.

8, 9, 10.—Constrictor Muscles of the Pharynx.

11.—Æsophagus.

12 —First Dorsal Vertebra.

these animals which Bischoff had operated upon, for they survive the operation for only a few hours at the most. The experimental process that I pursue allows the animals to survive, and leaves sufficient time to observe all of the phenomena which depend upon the destruction of the spinal nerves. At present I will only say, that after both spinal nerves had been destroyed by my process, the voice was abolished as in Mr. Bischoff's experiment. But, further, I have ascertained that the voice alone was extinct, while the movements of digestion, respiration and circulation continued without presenting the slightest lesion. I assured myself of these results by keeping the animals for months after the experiment.

The extinction of the voice is then a fact which confirms the result of M. Bischoff's experiment; but the integrity of the motor functions of the stomach, œsophagus, heart and lungs, are results opposed to his theory. Besides, it is evident, that if, as he advances, the spinal nerve was the only motor root of the pneumogastric, not only the larynx, but also all of the movements over which this nerve presides, should be destroyed. But this does not take place; whence it follows, that, after the extirpation of the spinals, there are motor filaments belonging to the vagus, and independent of the spinal, which continue the stomach, œsophagus, lungs and heart, in the ordinary performance of their functions. Nothing analogous is observed when all of the anterior roots, which are distributed to a member, are cut. Paralysis of motion is effected wherever the divided motor roots are distributed.

From all this, in connection with the facts, but contrary to Bischoff's theory, I conclude that in their anatomical, as well as in their physiological relation, the pneumogastric and spinal nerves are not in the same functional relations as the two roots of a rachidian pair, and that consequently the anatomical and physiological history of these two nerves ought to be separated.

All physiologists who, following the example of Bischoff, have considered the pneumogastric and the spinal as representing the two elements of a nervous pair, have been obliged to confound and study the functions of these two nerves simultaneously.

In opposition to this idea, we think that we have proved that the vagus and the spinal do not present an example of

association analagous to that which unites the roots of a rachidian pair, and that these two nerves are entirely independent of each other in the functions they perform; consequently we will separate the physiological study of the pneumogastric from that of the spinal, to which all of the researches which follow are specially directed.

The spinal springs by very numerous origins from the cervical spinal marrow, and ascends by a very curious recurrent path into the cranium, which it leaves by passing through the posterior foramen lacerum accompanied by the vagus nerve. These exceptional anatomical arrangements have always attracted the attention of anatomists.

Willis, who was the first to describe the spinal as a peculiar nerve, clearly pointed out its mode of origin from the sides of the cervical portion of the spinal marrow. "The spinal (accessory) nerve arises," says he, "upon the sides of the marrow, and commences about the sixth or seventh cervical vertebra by a very delicate beginning, then it ascends towards the cranium increasing considerably in volume by the successive addition of new originary fibres, until all of the fibres springing from the spinal marrow constitute in the vertebral canal, a round, white, nervous trunk which extends to the posterior foramen lacerum, etc.

I must stop an instant to examine this description, for although it may be very correct, it has not been understood, and not justly appreciated by modern authors. It follows, too, from his description, and from the drawings which accompany it, that Willis regarded as the only origins of the spinal, the filaments springing from the spinal marrow, and uniting at the level of, or very little above the first cervical pair in the vertebral canal in a common nervous trunk (B, fig. 13) while all of the originary filaments (B, fig. 13) springing from the medulla oblongata above the first cervical pair, and which are only coupled within the posterior foramen lacerum at K, fig. 13, are regarded by him as belonging to the pneumogastric nerve.

Scarpa, whose description has been adopted by modern writers, has given to the spinal nerve an originary description entirely different from that given by Willis, inasmuch as he has comprised in the origins of the spinal, the nervous fila-

ments (B, fig. 13) proceeding from the medulla oblongata, which Willis connected to the pneumogastric.

It is necessary, then, to be very certain on this point, as, according to Willis, the origins of the spinal consist only of the filaments arising from the cervical portion of the spinal marrow, while Scarpa adds to them also the filaments arising from the medulla oblongata and situated below the origins of the pneumogastric, from which they are separated only by a small space through which passes the small posterior artery of the cerebellum. This remark, which has never been made by any anatomist before myself, is the result of an attentive perusal of authors, and of a large number of minute dissections which I have made. It will serve as a starting point for the criticism that I will make on the opinions of Willis, Scarpa, and the moderns, upon the spinal nerve.

If the distribution of the spinal, pointed out by Willis, be examined, by giving the same originary boundaries to this nerve that he gives, his description will be found perfectly clear and very exact. By following the fascicle B, (fig. 13,) which results from the assemblage of all the originary filaments derived from the spinal marrow, and which constitutes the spinal accessory as defined by Willis, it is seen that when it is engaged in the posterior foramen lacerum that this trunk can be very easily disengaged and separated from the adjacent nerves, in specimens properly prepared. It is then ascertained that it continues directly with the external branch, which is distributed to the sterno-mastoid and trapezius muscles. So that the accessory, as described by Willis, does not contribute in any way to the formation of the internal anastomotic branch K; it does not then furnish any thing to the pneumogastric, on the contrary it receives from it an anastomosis (S, fig. 13) which is deeply and posteriorly situated.

Thus Willis is correct in his description, when he says, that the accessory which ascends into the cranium contributes nothing to the vagus, but that *it*, on the contrary, borrows from the vagus one or many filaments, and is then distributed to the muscles of the neck. Further, this description is perfectly exact, as it clearly establishes what Bendz has lately discovered, viz: that the filaments of the spinal arising from the spinal marrow specially constitute the external branch of the spinal nerve.

Scarpa, having given to the spinal nerve not only the same origins as given by Willis, but having added to it a small fascicle (B, fig. 13) arising from the medulla oblongata, ought necessarily to give an entirely different description of the anastomosis between the spinal and pneumogastric. Indeed, when we trace these origins, emanating from the medulla oblongata to the posterior foramen lacerum, it is evident that they are united to the spinal trunk, and seem to be confounded with it by being enveloped in a cellular sheath common to both. But in macerated and well-prepared specimens, by dividing this sheath, it is shown that the connection is a simple coupling, and that these same filaments from the bulb, reuniting at K, (fig. 13) are detached a little further down in one or many filaments (l. m.) to constitute the anastomotic branch of the spinal. This proves that the anastomosis which Scarpa described under the name of the internal anastomotic branch of the spinal comes solely from the superior originary filaments of the spinal B, (fig. 13) and arise from the medulla oblongata; and as we have demonstrated on the other hand, that Willis ranks among the origins of the spinal, the filaments springing from the medulla oblongata above the first cervical pair, it is very easy to perceive that he had not described the internal anastomotic branch. It was because he failed to make all of these observations and comparisons, that Bischoff reproaches Willis for not having seen that the accessory sent an anastomotic branch to the vagus. "*Qualis autem erat anatomicæ scientia, non mirum est Willisium non perspexisse quod sit accessorium inter et vagum vera ratio,*" etc.

To sum up: When the original boundaries of the spinal given by Scarpa is received, as it is by modern anatomists, it is to be preferred to that of Willis. After awhile I will give a physiological reason for this preference. It is of importance to know that the origins of the spinal should be distinguished from each other; as those which spring from the spinal marrow go to form the external branch, and those which arise in the medulla oblongata, form the internal anastomotic branch.

Scarpa was utterly ignorant of this arrangement. He described the spinal as a nervous trunk, whose fibers, without distinction of origin, separate into two portions; and he admits that the anastomotic part comes indifferently from all

the medullary origins, since he supposes, as we have said before, that the anastomosis is intended to convey to the pneumo-gastric the influence of the whole of the cervical marrow. Neither does Bischoff make this distinction, although his experiment should have led him to do so.

M. Longet, who has republished this doctrine of Bischoff, has developed the error which is attached to it, and has described the internal anastomosis as being derived from the whole of the spinal marrow, into which the spinal is inserted; only that author, reasoning on this imperfect anatomoical disposition, wants to find in it a final cause, and adds, that it is an admirable provision of nature to have insured such important functions to the internal branch of the spinal by causing it to take its origin from so extended a portion of the spinal marrow. *Longet Traite d'Anatomie et de Physiologie du Systeme Nerveux t.* 11, p. 266. 1842.

It is but right to say, that since that epoch, M. Longet has changed his opinion. (See his *Traite de Physiologie, t.* 11, p. 312. 1850.) A great difference of opinion exists among anatomists respecting the anastomosis that the spinal contracts, either in the medulla spinalis, in its passage to the posterior foramen lacerum, or as it leaves the cranium.

Before it enters into the posterior foramen lacerum, the spinal forms a nerve which gradually increases from below upwards, from about the fifth cervical pair which bounds its inferior origins.

Most anatomists describe the origins of the spinal in man as terminating below, on a level with the fifth cervical pair, although it often happens that in placing the preparation under water, one or more exceedingly slender originary filaments may be traced to the seventh cervical, and even to the first dorsal pair.

The trunk of the spinal situated on the sides of the spinal marrow, seems to be coupled to its lateral fascicles; but, by lifting up this nerve with the forceps, its radicals may be seen going obliquely behind it, and implanting themselves by dividing into two, and sometimes three, prongs (bifurcating and trifurcating) immediately before the radical filaments of the posterior roots. Towards the upper part of the neck, the filaments at the origin of the spinal are longer, and the trunk

of the nerve situated altogether on the sides of the spinal marrow rests on the posterior face of the ligamentum denticulatum. In proportion as it ascends, the origins of the spinal become shorter and shorter, and causes the trunk of the nerve to approach to the posterior fascicle of the marrow. In the lower part of the neck, it is almost behind, and very near the posterior rachidian roots. However this may be, all of the originary filaments of the spinal arise from the bifurcated or trifurcated origins [this peculiarity belongs to the anterior roots,] on the most posterior part of the lateral fascicle; consequently, immediately at the sides of the posterior, and also behind the anterior roots. In its course within the vertebra, the trunk of the spinal anastomoses with the posterior roots. In all of the preparations I have dissected, these connections have appeared to me constant and more marked with the roots of the cervical pair, as had already been observed by M. Bischoff. It does not appear to me that these were true anastomoses; that is to say, an exchange of nervous filaments between the spinal and posterior roots. It frequently happens that some filaments of the posterior root of the first cervical pair unite with the trunk of the spinal, but it is always easy to separate them, and to prove that they are simply coupled together. Some anatomists, and Mayer in particular, have described small ganglionary bodies on the trunk of the spinal where these couplings exist. I have often searched for these ganglionary bodies, but without finding them. I have sometimes seen the small ganglion of the posterior root of the first of the cervical pair adhering to the trunk of the spinal, which could be very easily separated in preparations after slight maceration. Apart from this, I have never seen the ganglion belonging to the accessory nerve of Willis.

After having left the first cervical pair, all of the origins that the spinal derives from the spinal marrow form a separate trunk (B, fig. 13), and it is this nervous trunk alone which, according to Willis, constitutes the *whole of the spinal.* This portion ascends to the posterior foramen lacerum, and bending a little outward, receives in its course a certain number of filaments (B, fig. 13) arising from the medulla oblongata, which adhere very closely together, and form the internal anastomotic branch. Willis thought that these fila-

ments came from the pneumogastric, and Scarpa ranked them among the origins of the spinal. At the first glance it appears difficult to separate accurately these filaments derived from the medulla oblongata, from those of the vagus, which arise absolutely on the same line. Nevertheless, these filaments, which are three or four in number, have bifurcated and trifurcated origins, which is not the case with the origins of the vagus, from which they are often separated by the passage of a branch of the posterior cerebral artery.

These three or four originary filaments B, arising from the medulla oblongata, sometimes unite with the spinal in the vertebral canal; but this most ordinarily takes place at the entrance of the posterior foramen lacerum, and are situated before and above the portion formed by the origin coming from the cervical marrow, to which they are only coupled, to form afterwards the internal anastomotic branch of the spinal.

The spinal being thus formed of two distinct originary portions, penetrates the foramen lacerum behind, and a little below the pneumogastric. Each of these originary portions may be separately traced in its course to the posterior foramen lacerum. The trunk B, (fig. 13) which is the result of all of the medullary origins of the spinal, and which I will call the *great medullary root*, is situated entirely behind, in the posterior foramen lacerum, and in macerated specimens can always be separated with the utmost ease, and followed in its whole course with the external branch of the spinal. I have always observed, and Willis has admitted, that the great root of the spinal receives an anastomotic filament S. from the pneumogastric when it is about to leave the posterior foramen lacerum. The fasicle k., which comes from the assemblage of the radicular filaments B. of the spinal, inserted in the medulla oblongata, and which I call the short bulbar root is at first connected by cellular tissue to the anterior part of the large root, with which it continues for some distance, as it is in a common neurilemma. But by carefully tracing this short root, it is ascertained that it separates from the trunk of the spinal by one or two, and sometimes many, filaments, which are cast upon the pneumogastric.

Scarpa, and modern writers, who adhered to this description, did not know—as I will prove—that the large medullary

root arising from the spinal, goes to form the external muscular branch of the spinal; while the short bulbar root, arising from the rachidian bulb, forms the internal anastomotic branch. Scarpa considered the trunk of the spinal going to the posterior foramen lacerum as an undivided nerve, entirely homogeneous; that all of its origins are interwoven and intimately fused together, and that it separates afterwards into two portions, the external branch *r.* (fig. 13) and the internal branch *l. m.*, intended to convey to the muscles of the neck and to the pneumogastric, the influence arising from all of the medullary origins of the spinal. This opinion of Scarpa has been adopted by Bischoff and many other anatomists; but it has been shown by physiologists who have admitted that it was necessary that each of these origins of the spinal should contribute, in a certain measure, to the formation of its internal branch; for, according to these authors, this might be a provision of nature to insure the functions of the internal branch of the spinal.

It is, then, evident, notwithstanding the opinion of Scarpa, and the authors alluded to, that the spinal is a nerve composed of two portions which are distinct in their origins and in their terminations, that the large medullary root corresponds to the external branch of the spinal, and the short bulbar root corresponds to the internal branch of the spinal which anastomoses with the vagus. Bendz makes a like distinction from the minute dissections he had made. As for myself, I have been led to these distinctions without a knowledge of his work; but from physiological experiments which permit me not only to point out this distinction, which is a capital fact, but to demonstrate it, as you will see a little further on.

The internal branch of the spinal, after separating from what has been called the trunk of the spinal, casts itself upon the pneumogastric by one, two, or many filaments, *l. m.* (fig. 13), which are situated behind and a little within the trunk of the vagus to which they are coupled, without being confounded in the gangliform intumescence that this nerve presents at this point. Spence, resting upon this particular fact, ingeniously compares this mode of adjunction to the manner in which the small motor root of the fifth pair unites with the great sensitive root.

It is difficult to trace, for any distance, the filaments emanating from the internal branch of the spinal, and, anatomically, it is impossible to distinguish them as clearly as we will do after a while by the aid of physiological experiment. Indeed, the internal branch of the spinal divides and spreads itself in white filaments on the trunk of the vagus, and presents at this point a speckled and grayish and gangliform intumescence. The union of these filaments of the internal branch of the spinal may be ascertained even in the pharyngeal branch as has been well displayed by Scarpa. Upon specimens properly macerated, the filaments of the internal branch are defined by their whiteness on the deep gray of the pneumogastric nerve. They are seen combining and separating, and it is impossible, anatomically, to trace them separately. I have not been able to separate, as Bendz has done, the filaments of the internal branch to the recurrent or inferior laryngeal nerve. The anastomosis of the internal branch of the spinal with the glosso pharyngeal and hypoglossal in the posterior foramen lacerum cannot be very distinctly ascertained.

The external branch of the spinal at its escape from the posterior foramen lacerum passes outside of it, and below the digastric and stlyo-hyoid muscles, then beneath the sterno-mastoid muscle; it frequently crosses this muscle, when it curves at its lower surface to gain the trapezius muscle, in which the spinal terminates. Pursuing this course, the external branch of the spinal sends branches to the sterno-cleido mastoid, and forms at the level of this muscle a plexus, to which the branches coming from the cervical pair, and in particular from the third, concur. This anastomosis is distinguished by the formation of a loop. After having crossed the sterno-mastoid the spinal is diminished, and again receives communications from the second and third cervical pairs; on the under face of the trapezius it receives two branches of the third, fourth and fifth cervical pairs. He is mistaken, who says, that in man the spinal is spent upon any other muscles than the sterno mastoid and the trapezius.

EN RESUME.

1. The spinal, or accessory of Willis, in man, is composed of a series of nervous filaments, of superficial or bifurcated

origins, which are implanted on the line separating the posterior and lateral cords of the marrow.

2. These originary filaments of the spinal begin above, in the lateral portions of the medulla oblongata, below the vagus nerve, and descend to about the level of the posterior root of the fifth cervical pair.

3. The spinal ought to be divided into two portions: 1st, the small bulbar root, which arises from the medulla oblongata, above the first cervical pair, and which forms the internal branch of this nerve, called the anastomotic branch of the vagus; 2nd, the large medullary root, which takes its rise in the cervical portion of the medulla spinalis, and forms the external branch of the spinal.

4. The anastomosis between the spinal and the pneumogastric in the posterior foramen lacerum, is not only formed by the anastomosis of the internal branch, which joins the trunk of the vagus, but there is also one or more filaments situated more anteriorly (*s.*, fig. 13) which come from the pneumogastric and is adjoined to the external branch of the spinal, so that in reality there is an exchange of filaments between the spinal and the pneumogastric.

5. The spinal nerve ought to be considered as an essentially motor nerve. Its internal branch adjoins itself to the vagus, and is associated, besides, to the glosso pharyngeal and the great sympathetic by the intervention of the pharyngeal plexus, while the external branch is associated with the cervical plexus.

Among animals we should maintain the divisions that we have established between the two originary portions of the spinal nerve. In all animals that I have examined (monkey, dog, cat, rabbit, goat, horse, or ox), it may be distinguished more clearly and accurately than in man, that the great medullary root goes to constitute the external branch of the spinal, while the short bulbar root goes to make up the internal anastomotic branch of the spinal. I have studied this arrangement particularly in the cat and rabbit.

The medullary origins of the spinal descend in certain animals much lower than in man. Thus in the ox, horse and cat, the last radical filaments descend even to the level of the third or fourth dorsal vertebra. As the medullary origins are des-

tined, as we have established, to constitute finally the external branch of the spinal, it is found that among mammifers the further the origins of the spinal extend below, the more voluminous the external branch becomes, and *vice versa*.

I have never observed in mammals the anastomosis between the posterior roots of the second cervical pair as has been pointed out in man. In the rabbit, the dog, the horse, etc., the external branch is distributed to the shoulders. This is somewhat different from what takes place in man. The bulbar origins of the spinal go to the vagus always above the cervical ganglion *nn.* and may also be seen in the cat and rabbit. In the cat, dog, rabbit and ox, I have always seen, as in man, the internal branch of the spinal anastomosing and intimately interwoven with the vagus.

It appears, however, that this is not a general fact, for Vrolik says, that in the chimpanzee the internal branch of the spinal nerve is not reunited to the vagus, but goes directly to the larynx, while the internal branch of this nerve in the same animal is distributed to the sterno-mastoid and the trapezius, but almost exclusively to the last named muscle.

In birds, and reptiles, the great medullary origin of the spinal has disappeared altogether, and only the short bulbar origin remains, as may be observed in the cock. In these animals there is besides no external branch of the spinal, and this is easy to conceive, since it wants the originary part of the marrow. It must be noted, too, as a consequence, that in birds and reptiles the muscles analogous to the sterno-mastoid and trapezius are absent. Bischoff had already observed that in birds all of the origins of the spinal passed into the vagus; but as he was ignorant of the division of this nerve into two portions, the one bulbar, and the other medullary, he had not given to this fact its true interpretation, by establishing, as I have done, this persistence of the bulbar origins of the spinal, when the medullary roots have disappeared. We may hereafter mention the physiological importance of this fact, in comparative anatomy. In fish, the spinal nerve does not exist, only because it has no role to fulfil, as we will show.

The properties of the spinal nerve are connected in one part by its recurrent sensibility, and in the other by its irritability to galvanic excitation.

The recurrent sensibility exists in the spinal nerve as it does in the anterior rachidian roots, and in some other nerves of motion. I have verified it in the dog, cat, rabbit and goat. It is necessary to take care not to divide the first and second cervical pair in making the incision; without them, the recurrent sensibility will not be found, and it is on this account it happened that I did not meet with it in some experiments.

At first I experimented for the recurrent sensibility of the spinal, before it entered the posterior foramen lacerum, and I then examined it after its escape from the cranium.

First Experiment—on the inter-rachidian portion of the spinal. After laying bare the occipito-atlantoidean membrane of a large dog, I opened it, and was able to see the two trunks formed by the medullary roots of the spinal, which were situated on the sides of the medulla oblongata. Having allowed the animals to rest for some time, I very cautiously raised the left spinal by means of a small hook, then, so as to have more freedom to pinch it, I divided it immediately above the first cervical pair; operating, then, on the two ends of the divided nervous trunk, I have clearly ascertained that the superior, or peripheric end was sensitive, while the inferior, or central portion, did not appear to possess any sensibility. I have obtained the same results on the spinal of the other side.

To assure myself of the source of the sensibility of the peripheric end, I have cut the vagus, which, theoretically, had been regarded as the posterior root of the spinal, and ought, according to this idea, to furnish the recurrent sensibility. The section of the pneumogastric of the same, or even of the opposite side, was accompanied neither by total loss, nor by any diminution of the recurrent sensibility of the spinal. I have then divided the posterior root of the first cervical pair, in the vertebral canal, and soon after the sensibility of the superior, or peripheric, end, was considerably diminished, but not altogether abolished. To extinguish it, I was again obliged to cut the second and third cervical pair. To do this, I sought these roots carefully, as they issued from the intervertebral foramen, by turning back the posterior muscles so as not to divide the anastomosis of the cervical and spinal plexus.

This experiment proves, then, 1st, that the spinal possesses

recurrent sensibility from its origin; and 2ndly, that it is not furnished by the pneumogastric, but by the first cervical pair.

Second Experiment—on the cranial portion of the spinal. On a large, well-fed and healthy dog, I laid bare, as high up as possible, the external branch of the spinal, which was a very difficult operation. I sewed up the wound, which was cold, and allowed the animal to rest. After the wound became warm, I pinched the external branch of the spinal, as it issued from the posterior foramen lacerum, and it was distinctly sensitive. Then I divided it, to obtain the two ends, the central and the peripheric, and ascertained, by pinching them successively, that they were both sensitive. The peripheric end was decidedly sensitive, through the recurrent sensibility which came from the cervical pair, and I caused it to disappear by cutting the roots, and even the anastomoses in the loops which exist between the spinal and the branches of the cervical plexus. These anastomoses are readily seen between the first pair and the external branch of the spinal. But whence comes the sensibility of the central end? It is probable that this is a phenomenon of direct, and not of recurrent, sensibility, for the latter is observed only in the nerves which are no longer directly connected to the nervous centers. This sensibility of the central end comes, very likely, from the vagus, by the anastomosis pointed out by Willis. But to be certain of this fact, it will be necessary to cut the pneumogastric in the cranium, and to produce the disturbances which shall modify the conditions of the phenomenon.

I have repeated these experiments with the same results on the goat, the cat, and the rabbit.

Third Experiment—on the irritability of the spinal nerve by galvanic excitation. By exciting the trunk of the medullary roots in the cranium (the long medullary root), only movements in the sterno-mastoid and trapezius muscles are brought on, and absolutely none in the larynx. By acting on the filaments which compose the short bulbar root (*B.*, fig. 13), convulsions of the larynx and pharynx take place, and none peeceptibly on the muscles of the neck. By acting on the origins of the pneumogastric, movements of the pharynx and the larynx are produced, but they appear to be of a different nature from the preceding, as they are somewhat more rapid.

To obtain these results, it is necessary to act quickly upon well-fed animals, but if a few moments are allowed to pass away, the origins of the pneumogastrics are observed to lose their susceptibility to galvanic action first, then the bulbar root, and finally the medullary root of the spinal, which consequently retains its excitability for a longer period, so that it would seem that we can by galvanism distinguish the motor fibers of the pneumogastric from those of the spinal, by the less duration of their excitability to galvanism.

However this may be, from this fact I conclude that the vagus possesses at its origin, and independent of the spinal, an evident motor property over the larynx and pharynx, which, as we shall see, is in perfect harmony with the experiments on living animals.

THE SYMPTOMS, DIAGNOSIS, AND TREATMENT OF INTUSSUSCEPTION. WITH CASES.

Report read before the College of Physicians and Surgeons, by David W. Yandell, M.D.

In the following report, I have attempted to embody an account of all the cases of Intussusception contained in the very large number of medical periodicals, and other works, to which I have had access. I have also attempted to condense the materials, which I have thus gathered, into limits suited to the sitting of the College, but in this I fear I shall disappoint the Fellows. I trust, however, that I shall, in some degree, at least, atone for the fault, by the practical deductions which will conclude the report:

Case I. A healthy boy, aged six months, had, on the 8th inst., two small, loose dejections, containing blood, passed without pain. 9th—Restlessness, nausea, and occasional distress, referable to the bowels. 10th—Distress greatly increased, without marked heat, tenderness, or fullness of abdomen; slight retching, no dejection, thirst, pulse very weak. Castor oil, ℥ss. given and retained, followed in a few hours by a large, fecal and bloody evacuation, after which the abdomen began to swell and became greatly enlarged; no proper tenesmus, though throughout the day there was frequent and sudden action of the abdominal muscles, a kind of incomplete, abruptly-terminating strain. At 2 P. M. patient was found moribund, gasping, gagging; intussusception diagnosticated; unsuccess-

ful attempts made to force water up the bowel. Just before death, which occurred at 6 P. M., patient threw up—it could hardly be called vomiting—a little thin liquid. Necroscopy: The ileum had passed through the cœcum and into the ascending colon, the whole lying over the right kidney; the gut was red from increased vascularity, but soft, and so far from being strangulated as to be easily withdrawn; cœcal appendage scarcely involved; upon the inner portion of the bowel, Peyer's glands were as much developed as in typhoid fever, being soft, with some red points and some lymph upon the surface which was very irregular, the mucous membrane itself not being remarkable. Midway the bowel, the mucous membrane was inordinately red and rugose for about half its extent from the free extremity, but without mucus, blood or lymph. The passage through the intussusception before it was withdrawn seemed sufficiently free, the intestine above being filled with liquid, and that below comparatively empty.—*Dr. Cotting in Boston Soc. for Med. Impt.* 1852.

Case II.—An adult, with obstinate constipation and tenderness over a circumscribed spot, relieved by copious injections into the rectum of warm water.—*Dr. Baldwin. Amer. Jour. of Med. Sci.* 1852.

Case III.—A man, aged 23, robust, subject to frequent attacks of colic. On the 12th of February, he was seized at night with violent pain in the lower part of the abdomen, with shivering, frequent vomiting and purging. Next morning head hot and painful, tongue foul, thirst, abdomen swollen and tender to the touch; pulse full, hard, frequent; vomiting; watery stools, tinged with blood. 19th—Tenesmus. 23rd—Prolapsion of part of the intestine, which was easily reduced. 26th—Passed twenty inches of bowel, being a portion of the ileum, the cœcum, vermiform appendix, the whole of the ascending and a part of the transverse colon. A month after, the patient left the hospital well.—*Dr. Nagel. Gazette Medicale.* 1854.

Case IV.—A lad aged 17. May 26th—Taken with general febrile symptoms; expression anxious; abdomen becoming tympanitic, not tender; painful tenesmus; no dejection; every thing rejected by the stomach, matters vomited being grass-green. Calomel, opium, purgatives, and turpentine glysters were given during two days. 28th—There was general tenderness of the belly, especially of the left hypochondrium, where a distinct and hard tumefaction was observed. Leeches, fomentations, etc., were used, but no evacuations occurred until the 31st, when they were copious and very offensive. The vomiting now ceased, and the patient gradually improved. June 8th—Passed two and a half or three inches of what was supposed to be small intestine. Complete recovery.—*Am. Jour. Med. Sci.*

Case V.—A man, in vigorous health, 35 years of age, suddenly seized with excruciating pains in the abdomen, with partial remissions and obstinate constipation, which resisted all means of relief, died in intense agony in thirteen days. At the necroscopy, the ileum was found to have made a complete revolution upon itself with the peritoneum as its axis, so as to strangulate a knuckle of intestine five inches in length. There were two points of strangulation: the first, immediately above the intussusception; the second, twelve inches above the last. They were twisted around each other so as to form a *knot*, which it was difficult to undo after the gut had been removed from the body. The intussusception was one and a half inches in length and four inches above the termination of the ileum. The coats of the intestine were so firmly agglutinated that they presented the appearance of a fleshy tumor, blocking up its entire caliber. The ileum was of a dark red—almost black—hue throughout all its coats, extending even to the mesentery; and about twenty inches of the bowel were congested.—*Dr. Gordon. South. Med. and Surg. Jour.* 1845.

Case VI.—A man, aged 35, health not good, subject to colic, was attacked with severe pain in the right lumbar region. V. S. and cathartics produced partial relief. Three days after, when seen by Dr. D., patient had pain in its original seat, general tenderness of the abdomen, and at short intervals most excruciating pains, except when under the influence of anodynes. This state continued for four weeks, death seeming inevitable, when a portion of small intestine, a foot and more in length, was voided *per anum*, and the patient recovered. There was no vomiting in this case, and cathartics operated without unusual pain or difficulty.—*Dr. Dayton. N. Y. Jour. Med.* 1845.

Case VII.—A girl, aged 9 years, after an attack of dysentery, had vomiting, great prostration, and immense distention of the belly. On the fifth day she passed large quantities of bloody serum without feculent matter. From the seventh to the twelfth day, there were small quantities of fæces discharged, when perfect relief ensued upon the passage of a portion of intestine, doubly invaginated, ten inches long. The treatment consisted in opiates endermically applied and thrown into the rectum.—*Dr. Paterson. London Lancet.*

Case VIII.—A girl, six months old, cried violently Friday evening, but was quieted by Godfrey's cordial. Next morning she was feverish, and cried. Castor oil was taken, but rejected. At 12 M., vomited all ingesta; no fever or unnatural fullness of the bowels; tranquil; somewhat disposed to play; obstinate constipation; purgatives; opiates; a good night. Follow-

ing night, the skin was cool; no tympanitis; no tenderness; gradually grew cooler and more languid, and died Monday, A. M., fifty-five hours after the first appearance of the disease. Necroscopy. A knot was felt through the abdominal walls in the right iliac region, which proved to be about eight inches of the small intestines which had slipped through the ileo cœcal valve.—*Dr. Shipman. N. Y. Jour. of Medicine.*

Case IX.—Boy, æt. 12, previously healthy, complaining of pain in the belly for two or three weeks, was seized with severe pain in the left abdomen. In two days after, the pain had extended over the whole abdomen; not much tenderness on pressure; great thirst; constant vomiting of fetid and greenish matter. A hard body was felt, and its outlines seen in the position of the transverse and descending colon, and the finger carried into the rectum touched the tumor. The treatment consisted of cathartics, injections, sinapisms, opiates, a tube carried into the colon, etc. Death ensued on the evening of the fourth day. Necroscopy. Twelve inches of the jejunum were found forced into the next twelve inches below. At the commencement of the fold, the intestine was so much contracted as scarcely to admit the point of the finger, and felt like a cartilaginous ring.—*Am. Jour. Med. Sciences.*

Case X.—A girl, aged six years, after eating a quantity of raw carrots, was seized with pains in the bowels, which continued more or less for eight months, when she died. The bowels meantime were regularly open, about three times a day, but the stools were always very thin and watery, and during the last three months they were mixed with slime and blood. As the lower half of the colon was lined with the inverted upper half, it followed that no part of the fæcal remains came in contact with the colon, the termination of the ileum being drawn down through the center of the intussusception to the anus. This may account for the stools being thin and watery. There was no remora in the large intestines for the formation of natural stools.—*Mr. Davies. Med. Chir. Rev.* 1825.

Case XI.—A man collecting wood, felt all at once a dragging pain in the region of the umbilicus, which quickly augmented and forced him to cease work. He crawled home with difficulty and lay down. In the evening had a motion. Next day worse, with colicky pains every 20 or 30 minutes. Castor oil, salts, V. S. Temporary relief; pains returned in the evening with increased violence, and much discharge of wind; symptoms continued the same for four days. The Dr. found the patient in bed, not then in pain, but the countenance pale and anxious, temperature not much increased, abdomen not hot or distended, but sensitive on pres-

sure, pulse sixty, regular and soft; a tumor detected about the angle formed by the ascending and transverse colon, no stools for five days, had vomited only once. In half an hour agonizing pain came on, the tumor appeared about the size of the fist, was hard and itself the seat of pain. V. S. and leeches to the part. Strict antiphlogistic treatment until the eighth day, while baths, fomentations, glysters, etc., were tried without avail; an operation proposed, but not assented to; red oil and opium given hourly for six hours; large quantities of cold water thrown into the rectum; patient felt it reach the hardened part, but no further. Vomiting on the ninth day; not stercoraceous; abdomen greatly distended; tumor unchanged; six ounces of mercury, without effect. Operation consented to and performed on the tenth day. *Operation*—Abdomen opened at the outer edge of the right rectus muscle two inches above the level of the umbilicus. The hardened part, being a portion of the ileum, was withdrawn, the gut incised at one end of the intussusception for two inches, the finger introduced into the opening and the intussuscepted part pushed back from right to left, the operator gently drawing that part of the intestine containing the intussusception toward him. The entangled intestine, when unfolded, measured two feet; no traces of inflammation; the intestinal wound was closed by the Glover's suture, the ends brought out of the wound; the integuments secured by the interrupted suture. Natural stool on the second day. By the fourteenth day he was completely cured. *Dr. Fuschstius. Hufeland's Jour.* 1825.

Case XII.—A young man (Mrs. Belzoni's servant) had a severe abdominal inflammation some years before, and since had been very irregular in his bowels, and subject to prolonged constipation; was seized with abdominal pain while lifting a heavy weight. This was attended with obstinate constipation, which was never overcome. He died in agony ten or twelve days from the commencement of the disease. Necroscopy. The intestines above the obstruction were greatly distended, but no inflammation to account for death. A portion of ileum had become entangled under an old band, formed, probably, during a previous illness, and though easily drawn out, complete obstruction had been the consequence.—*Med. Chir. Rev.* 1825.

Case XIII.—A man, aged forty years, after some muscular exertion, felt acute pain in the right iliac fossa, followed by colic, frequent vomiting and purging, with intervals of ease; had occasional discharges of blood. During the paroxysms the left iliac region presented the figure of a large convolution of intestine. Countenance drawn, tongue furred, thirst, slow pulse. Leeches, fomentations, demulcent drinks,

and the like. Six days after admission, and four months and three days after first seizure, while straining at stool, he felt something give way in the abdomen, and in a few moments more he became very ill, abdomen inflated and exquisitely tender. He died at 8 o'clock the same evening. Necroscopy. Universal peritonitis, but no extravasation. Recent coagulable lymph abundant. The cæcum and ascending colon were carried forward and enclosed in the last half of the transverse arch and in the sigmoid flexure, which was as thick as a man's arm, and hard or solid to the touch. The cæcum was found in the sigmoid flexure in the iliac fossa. The invaginated parts were agglutinated together, and in some places gangrene had commenced. Up to the day before the patient's death, he had fluid evacuations.—*M. Buet. Arch. Gen'l.* 1828.

Case XIV.—A man, aged 22, admitted 8th Aug., 1825, had had colicky pains and diarrhea for some time, with intervals of ease. Ordered emollient fomentations, diluents and lavements. On the 12th and 13th the symptoms were aggravated, features sharp, pulse concentrated, and the left iliac fossa very painful on pressure. Leeches and opiates. 14th, pain insupportable, nausea, vomiting, and spasms. 16th, symptoms of peritonitis; a great number of leeches applied, but the disease was unchecked, and death occurred on the 18th, ten days after admission, and six days after the appearance of urgent symptons. Necroscopy. General peritonitis; numerous adhesions and false membranes, but no effusion or extravasation. By moderate traction it was discovered that the cæcum, ascending and transverse colon were engulphed in the descending colon. The cæcum was gangrenous.—*M. Buet. Arch. Gen. Vol. VIII.* 1828.

Case XV.—A man, aged 44, was taken suddenly with pain in the bowels Nov. 25, which increased until next morning, when he was seen. Pulse full but not hurried, tongue clean, face anxious, belly not distended, no evacuations since attacked, excruciating pains which were partially relieved by pressure about the umbilicus with intervals of three or four minutes ease, severe vomiting, and thirst. Purgative glyster; repeated, no relief; blister over the whole abdomen, and opiates; vomiting allayed; pains in some degree dulled; twelve grs. of calomel; twelve hours after, pain and vomiting had returned as violently as ever; copious warm water injections tried, but with no avail; twelve grs. of calomel on the morning of the 27th, without relief; pain, on pressure in the right iliac fossa; a gallon of warm water thrown up; no benefit; air was then injected with a common bellows with immediate relief, and on the fourth trial an evacuation was obtained, the vomiting ceased, and he complained only of general soreness; eight grs. calomel and one gr. opium, fol-

lowed by free evacuations and complete cure.—*Med. Ch. Rev.* 1839.

Case XVI.—A woman, aged 44, weak and small, the mother of many children, subject to fits of colic, had an attack on Sept. 19th, which was not relieved by customary remedies and was attended with constipation. Seen on the morning of the 21st. Paroxysms every two or three minutes of violent, deep-seated pain; tenderness on pressure, especially in the right iliac region; heat little increased; pulse small and hard; urine scanty; no evacuation since the 19th; every thing swallowed was rejected. Various remedies were tried until the 23rd, but without relief. On that day fæces were discharged by the mouth, and hiccough had commenced. Dr. Ebers then considering the case hopeless, administered ʒij. of quicksilver, 10 drops of laudanum and several small cathartic doses; a few hours after, ʒj. more of mercury. Soon after, every symptom indicated relief, gurgling was heard in the intestines, but no evacuation. The favorable symptoms disappearing, other ʒiij. of mercury given at 2 o'clock in the morning of the 24th; patient fell asleep and remained quiet for two hours, when at length copious feculent evacuations occurred, and all her sufferings were relieved. By the middle of October, with the exception of weakness, her health was re-established. No salivation.—*Dr. Ebers. N. Y. Med. and Phys. Jour.* 1830.

Case XVII.—A woman, several days ill with obstinate constipation, dreadful abdominal pains and vomiting, was admitted into hospital. On that day she vomited a large quantity of feculent matter. Countenance sunk, skin and extremities cold, pulse small and quick, strength exhausted, abdomen tender and doughy. A warm bath and glysters were tried without avail, medicines were immediately rejected, ʒiv. of mercury were given, and in a few minutes she became a little quiet; in an hour had ʒij. more of quicksilver, after which she fell asleep. In half an hour she discharged an enormous quantity of fetid fæces. She recovered with great rapidity.—*Ed. M. and S. Jour.*

Case XVIII.—A boy, aged 16, ate some nuts Sept. 8th; unwell on the 9th; seen by Mr. Fox on the 10th; pain about umbilicus; no motion for twenty-four hours. The case assumed all the characters of intussusception, and resisted all remedies. On the 16th Mr. Fox determined to try inflation. This was done by means of a common bellows, a bladder and common enema pipe. The inflation was forcibly but slowly persevered in for many minutes until the boy complained of a disposition to "break wind." The tube was withdrawn, and in twenty minutes a copious evacuation took place. On the 23rd, at Mr. Fox's visit, he found the patient comfortable, but the nurse

showed him a large piece of bowel which had come away with one of the stools. It was a portion of one of the intestines, five inches long, with some of the mesentery still adhering. The lad recovered perfectly.—*Mr. Fox. Med. Chir. Rev.*

Case XIX.—A negro man, aged 20, seventeen days ill with pain, stercoraceous vomiting, obstinate constipation, etc. Incision made in the linea alba, commencing two inches above the umbilicus and extending two or three inches below. The intussusception was found in the ileum. The bowel was grasped above and below the point of obstruction, and after several efforts of considerable force, the adhesions gave way. The parts seemed to be on the verge of mortification. The wound was closed by a few stitches and adhesive straps. His recovery was rapid and entire.—*Dr. Wilson. Transylvania Jour. Med. and Surgery.*

Case XX.—A woman of spare habit, admitted into hospital January 25, 1840. Attacked the day before with pain in the abdomen, vomiting, diarrhea and tenesmus. When admitted, the diarrhea had ceased, but the vomiting and tenesmus continued until the 27th, when she died. No tumor could be detected during life. Post-mortem: First stage of peritonitis; no effusion. The termination of the small, and commencement of the large intestines, formed a tumor of considerable size, extending from the left side downward to the right iliac fossa. It consisted of an invagination of the ileum, about twelve inches of which had passed through the ileo-cæcal valve into the cæcum and colon. A pear-shaped, fleshy polypus, about an inch and a half in length, grew from the ileum, and seemed to be the cause of the invagination.—*Dub. Jour. of Med. Sci.* 1840.

Case XXI.—A man; usual symptoms; movable tumor near the umbilicus; duration not stated: diagnosed as malignant disease; on post-mortem found to be a retrograde invagination of the descending into the transverse colon to the extent of three or four inches: no general inflammation, but the intussuscepted intestine was found in an ulcerated condition, accounting for an unhealthy discharge which had existed during life.—*Dublin Med. Press.*

Case XXII.—A man, aged 45, had an attack of violent abdominal pain during the night of March 3d. Next morning Dr. J. was summoned, and found the patient vomiting frequently, pulse nearly natural, no fever, abdomen painful on pressure. Cups applied, and camphorated effervescing draught prescribed. In the commencement of the attack all the usual remedies were applied, but the case ran the ordinary course until March 12th, when a copious discharge of fetid, black blood took place, followed by great exhaustion, and death.

Post-mortem: traces of peritoneal inflammation and alteration, but not of great extent or severity. Fourteen or fifteen inches of the ileum had passed through the ileo-cæcal valve into the cæcum and colon. The colon contained a large quantity of blood. The hemorrhage was undoubtedly the immediate cause of death. An hour before it commenced, the symptoms presented nothing indicative of immediate danger. Had the hemorrhage not occurred, adhesive inflammation, followed by sloughing of the invaginated portion of intestine, might have left a free passage from the small into the large intestine. The invagination probably commenced several months before in a previous attack of colic, from which time he had uneasiness in the right iliac region, with repeated relapses. The large, fibrous mass which existed between the peritoneal coats of the invaginated part must have been the work of time, and could not have been produced at the last attack.—*Samuel Jackson. Amer. Jour. Med. Science.* 1833.

Case XXIII.—A male child of three and a half years. He was pawed by a horse two years before, and much contused upon the back and in the left iliac region. From then up to the 1st of November, he frequently complained of pain in the abdomen in the vicinity of the injury. At that time it became greatly aggravated, with occasional vomiting. The mother administered large doses of laudanum without benefit. About the beginning of January my attention was called to the case. Vermifuge was ordered, supposing the trouble owing to worms; no change in the symptoms. About six weeks previous to his death, diarrhea came on, with discharges of bloody mucus; pain still severe, with great tenesmus at stool; two lumbricoid worms passed; prolapsus ani also occurred: the child was greatly emaciated, and suffered intensely. Calomel and opium were given for some time, but finally exchanged for sol. sulp. morph., which was continued *pro re nata* till death, July 10th. Post-mortem—Some peritoneal inflammation; the lower part of the ileum, cæcum, colon and rectum were inflamed, the cæcum approaching gangrene; it was inverted into the colon, passing through its whole length, and lodging in the rectum near the anus; the cæcum, all the colon except about ten or twelve inches of its lower part, and a considerable part of the ileum, had passed into the lower portion of the colon and the rectum, making altogether more than two feet of inverted bowel. The apparent prolapsus ani was probably the protrusion of the cæcum through the sphincter.—*Amer. Jour. Med. Sci.*

Case XXIV.—Dr. William Merriman relates the case of a child who was taken suddenly ill, appearing to suffer in the bowels: a good deal of purgative medicine was given without

effect; it died at the end of four days. On post-mortem, intussusception was found, the cæcum and its appendix, and the cæcal valve having passed into the colon.—*London Lancet.*

Case XXV.—Mr. Snow assisted at the post-mortem examination of a child that died of a similar intussusception, but to a greater extent, for the ileum passed into the colon as far as the commencement of the sigmoid flexure; the coats of the intestines were much swollen from congestion.—*London Lancet.*

Case XXVI.—A man, aged 30, undertook severe labor after eating a quantity of cherries, swallowing the stones. He was soon seized with pain in the hypogastrium, followed by vomiting. A short distance from the right iliac fossa, a shining tumor the size of a pullet's egg was observed; no action on the bowels for four days; stercoral vomiting. As death seemed inevitable, gastrotomy was performed. The tumor was found to consist of a fold of ileum twisted upon itself so as to form a ring, which could not be liberated. Under these circumstances three incisions were made into the projecting intestine. The incisions were united by suture. Recovery slow, but perfect.—*Dr. Reali. Rev. Med. Chir.* 1851.

Case XXVII.—A man aged 63, had violent pain and spasms in the epigastric and umbilical region; violent vomiting; frequent desire to go to stool; passed nothing; pulse 96, weak. Castor and croton oil; flexible tube carried to the sigmoid flexure; injection of three quarts of soapsuds, which brought away large quantities of grumous blood mixed with fæces; in four days he found the bowel hanging from him; in three days after, getting hold of it, the patient pulled it away; it measured four and a half feet.—*Dr. Sheldon. Med. Chir. Rev.* 1850.

Case XXVIII.—Mr. Harlan, of London, reports the following: A girl, five months old, became restless and suffered from excessive gastric irritability; tongue furred and white; no fever. Ordered calomel and castor oil, which, though retained, were without effect. When the patient strained, the bowel protruded an inch or more at the anus. This was thought to be an ordinary inversion of the rectum. The child lived until midnight. At the post-mortem, the colon appeared as if distended with black fæces. The intussusception commenced in the ileum just where it enters the caput coli, which was found in the left hypochondriac region. The parts involved in the disease were about one inch of the ileum, the whole of the cæcum, with a portion of the colon—these being received into the remaining portion of the colon. The cæcum had descended into the rectum, which gave the latter the appearance of fæcal distention, although very little fæcal matter was found below the commencement of the intussusception, and that

little was fluid. The cæcum was thickened from inflammation, and its inner surface, together with that of the strictured colon, was gangrenous. It was this hardened, tumefied and inverted cæcum which protruded during the act of straining, and had been mistaken by Dr. H. for a prolapsus of the rectum.*—*Med. Ch. Rev.* 1839.

Case XXIX.—During the same year, and in the same periodical, Mr. Gorham details three cases. One was an infant four months old, who vomited when taken from the breast, a 2 o'clock P. M. This continued throughout the case. Between 7 and 8 o'clock the same evening, it was first observed that pure blood alone was evacuated per anum. The quantity amounted to three or four teaspoonsful; the skin was pale and hot; there was no emaciation; the infant lay quiet for a few minutes, and then cried out, the countenance expressing pain; abdomen soft and hot; nothing abnormal could be felt in the rectum; some dark blood followed the digital examination; vomited six or eight times within half an hour; enemas were returned as fast as given. Poultice over the abdomen, and $\frac{1}{4}$ gr. ext. of conium in a teaspoonful of camphor mixture given every four hours. No more blood passed, but the patient always vomited after taking the breast; convulsions came on during the night, and at 9 A. M. a fit proved fatal. Post-mortem—Four intussusceptions of the small intestines, which were easily reduced, were found overlying the peritoneum, which was slightly red. The lower part of the ileum was a deep red color and intussuscepted in the ascending colon, which latter was also swallowed within the transverse. The appendix cæci was highly injected, and along with the cæcum occupied the upper part of the invagination. The colon below the intussusception was of a dark bluish color.

Case XXX.—A woman aged 26, had obstinate vomiting after uneasy sensations in the stomach; violent paroxysmal screwing pain between the sternum and the umbilicus. Calomel, jalap, castor oil, laudanum and the warm bath all useless. Five days passed without a dejection; the common bellows was used, and as soon as the air entered the rectum the countenance lost its anxiety, and the patient was relieved. In a minute she passed a stool, and complete recovery resulted.

Case XXXI.—The symptoms were vomiting of a dark, fetid, oily fluid, hiccough, severe pain about the navel, no motion for four days, when the bellows was used. Six dejections followed in the course of the day, and the patient recovered.—*Med. Ch. Rev.* 1839.

*The post-mortem in this case is very loosely described, and in some portions is manifestly incorrect.

Case XXXII.—A woman aged 25, had diarrhea and occasional colic for two months, with fits of vomiting. In the second week of May she was admitted into the hospital. Firm, hard swelling in the ileo-cæcal region; not very sensitive on pressure; leeches to the swelling and anus without benefit; obstinate constipation and vomiting, at first bilious, then fæcal. After other means had failed, a pill of croton oil produced an evacuation and gave relief, which was, however, only temporary, for on the following week all the distressing symptoms returned, resisting croton oil and all other remedies. Gastrotomy was now performed, as a last resort. An incision was made over the tumor, and a loop of small intestine drawn out and opened to the extent of an inch and a half. A quantity of fæcal matter flowed out, with great relief to the patient. The wound of the intestine was with some difficulty retained in the external wound by ligature; light dressings were applied, and the patient put to bed. On the next day the condition of the patient became rapidly worse, and she died that evening. Post-mortem—General peritonitis in the last or purulent stage. The intestine which was opened proved to be the ileum, eight or nine inches above the caput-coli. The obstruction was found to be at the junction of the cæcum with the colon. The constriction was so great as barely to allow of the passage of the little finger. The cæcum rested posteriorly on an indurated scirrhus-like mass, but the mucous coat of the gut was uninjured. The rest of the intestinal canal showed but slight signs of disease.—*M. Monoid. Arch. Gen.*

Case XXXIII.—A child six months old, put out to nurse at three months; ailing, and troubled with colic and diarrhea from that time. On the afternoon of August 10th, he had a small, natural motion, which was the last, although he lived until the morning of the 14th. On the 11th Dr. B. was called in; found the napkins stained with blood; food and injections were immediately rejected; great and continual uneasiness, and progressive feebleness and emaciation up to the hour of death. Post-mortem—On slitting up the rectum, its impacted contents were found to consist of the cæcum, the greater portion of the colon, and a small part of the ileum, with some omentum.—*Dr. Burford. London Lancet.* 1840.

Case XXXIV.—The reporter's own son, aged three years, had for nine days no evacuations, although the most powerful purgatives and enemata were resorted to. At length inflation was practiced, and in a few minutes was followed by free evacuation. The inflation was repeated with a like effect, and the boy rapidly recovered.—*Dr. Blacklock. London Lancet.* 1831.

(To be continued.)

ABSTRACTS FROM FOREIGN JOURNALS.

In the Medical Times and Gazette, for January 19th, there appears an interesting article, translated from the French of Briquet, on "The Treatment of the Hysterical Paroxysm by Chloroform." We copy it entire.

The ancients, believing that during the attack of hysteria the uterus quitted its place to rise towards the upper parts of the body, had great confidence in the efficacy of odors—the uterus being supposed to have a sympathy for the pleasant and an antipathy for the disagreeable ones. During paroxysms, therefore, fetid substances were respired, while at the same time, aromatics were applied at the vulva in the form of embrocations or fumigations; the conjoined effect being to restore the organ to its normal position. Concurrently with these means, the ancients had recourse to another in bad attacks which they considered as of great power—viz., the passing the finger, anointed with some special aromatic substance, into the cervix uteri and fundus of the vagina, or determining by titillation the expulsion of a special humor from the vulva and clitoris. After these practices had fallen into desuetude, others, of every kind, which it would be useless to enumerate, were had recourse to, proving that these paroxysms were considered to be dangerous, or even mortal, and that their arrest must be accomplished at any price.

At the present time, now that experience has shown the uselessness of all these remedies, and the little danger of a hysterical paroxysm, the expectant treatment is that followed; taking care, however, to keep the patient in a suitable position, and to cause her to respire stimulating vapors. Still, M. Briquet is of opinion that the hysterical paroxysm should not be thus left by itself, inasmuch as it becomes a predisposer to future attacks, and always gives rise to an injurious disturbance of the economy. He is, therefore, always in the habit of arresting it by means of chloroform. A little dossil of charpie, the size of the finger, and not too closely pressed together, upon which some chloroform has been poured, is applied to the nostrils, the mouth being covered with a cravat. The patient is made to take deep inspirations, which if in convulsions she does of herself. At the end of from two to four minutes her agitation ceases, her limbs fall motionless on the bed, sleep follows, and the paroxysm has been cut short. Not long afterwards she wakes up with a headache, apparently the effect of the chloroform, which is not of long duration. During the first inspirations there is considerable agitation, and the patient must then be carefully supported; but a tranquil sleep soon supervenes.

Hysterical patients, during the convulsive paroxysm, seem to be endowed with great susceptibility as regards the vapors of chloroform; a few minutes' inhalation, unaided by any apparatus, sufficing to produce the anæsthesia. The agitation preceding sleep is generally but slight, and in nowise to be compared with the resistance to the action of this agent, so frequently witnessed in persons about to undergo surgical operations. The convulsive condition imparts to the subjects of hysteria a muscular power and an amount of vital resistance which completely shields them from the accidents resulting from debility; so that we never observe in those of them (M. Briquet is speaking after twelve years' employment of chloroform under these circumstances) who have been submitted to anæsthesia during the paroxysm either convulsions, coma, somnolence, or dangerous syncope. This means succeeds in at least nine out of ten cases. Those subjects who prove refractory to it are very robust persons of sanguineous temperament, and in whom the attack is very violent. In them the agitation is appeased, and sleep comes on; but after a few minutes' calm, the agitation is reproduced stronger than ever. Chloroform restores calmness a second time, but this is of short duration. Fortunately, these cases are very rare.

When the hysterical paroxysm seems to take its origin from some painful point in the limbs or trunk (and M. Briquet shows that a painful or uneasy condition of the muscles of the epigastric region is a frequent point of departure of this kind) chloroform, applied topically during the intervals of the paroxysms, frequently causes the disappearance of such pain, and of the attacks it induced.—*Archives Generales*, tome xiii, p. 664.

In the same journal we find the following description of a consultation among the Neapolitan doctors:

A Consultation at Naples.—Dr. Quadri, the celebrated oculist, of Naples, states that in that city a consultation is not a means of advising upon a case sought by the practitioner, but is forced upon the family of the patient by public opinion—as, if it allowed one of its members to be treated for a serious disease by one practitioner only, it would incur universal censure. The consultation takes place without any discussion, and is a gratuitous spectacle to which the neighbors are invited in large numbers. The doctors being placed in a circle, the youngest speaks first and the eldest last, each making a more or less declamatory discourse on the case, and not unfrequently sacrificing the history of the patient to a fine phrase—the great object being to produce an effect, and not to contradict the views of the old consultant, whose opinion has been ascertained beforehand; upon him, therefore, devolves the

determination of the treatment—merit succumbing here to age. Frequently this president is deaf, and he neither hears the answers of the patient nor the observations of his colleagues; but this is of no matter, as it devolves upon him to determine the fate of the patient. God help you if you offer the slightest opposition to the conclusions of this nestor; you will be subjected to the reprobation of the entire faculty. You will be stigmatised as imprudent or insolent, and to be quite ignorant of the *galateo-medico*.

The following account of death from an unusual cause, occurred at St. Bartholomew's Hospital, under charge of Mr. Skey:

S. H., aged 19, a fine, healthy-looking young woman, walked into the Sugery about 2 A. M., on Tuesday, Jan. 3, and stated that she had had a few words with a man, who had given her a push, and driven the hook of her dress into her chest, about fifteen or twenty minutes previous. Mr. Farrington examined her, and found that on the right side of the sternum, between the second and third costal cartilages, the skin was projected forwards about one-eighth of an inch by some foreign body, which received a pulsation synchronous with the action of the heart. A small puncture, such as would admit a pin, about a quarter of an inch from the projection, was the only wound visible. There was a single spot of blood on her chemise. On questioning her, she said it might possibly be a needle, as she sometimes carried them stuck in her dress. She complained of a slight sense of fullness in her throat, and pain in the right shoulder. Her respiration was slightly accelerated; pulse 120, which might have been due to excitement. She said that if it could be taken out, she was quite well enough to go home. It was with much difficulty that she was persuaded to remain in the hospital. She walked to the ward, and on arriving there complained suddenly of great pain in her chest, and of feeling very faint. Mr. Farrington saw her a few minutes afterwards, and found her in great pain. Her countenance was livid, and her expression anxious. The projection on the right of the sternum still remained, though it was now quite motionless. The action of the heart was extremely feeble, the radial artery being scarcely perceptible. Respiration was deep and slow, ammonia was applied to the nostrils, and the pulse slightly revived. Mr. Farrington now made a small incision over the projection, and with some little force extracted a piece of a needle one and seven-eighths of an inch long, the outer end being slightly bent, and the part containing the eye being broken off. It took a direction obliquely beneath the sternum and rather downwards. Brandy was given to her,

but she was unable to swallow it. Her condition gradually became worse. Delirium supervened, the heart became more and more oppressed, the sounds becoming more feeble and distant, the pulse being occasionally quite imperceptible, and then feebly returning. Respiration deep and at long intervals. She gradually sank, and died about an hour after her arrival at the hospital.

Autopsy, Thirty-two Hours after Death.—The seat of puncture was found to be just below the second costal cartilage and close to the right edge of the sternum. Two small punctures were found in the pericardium, their situation nearly corresponding to the external one. The pericardium was fully distended and contained about a pint of blood, the serum having separated from the clot, which latter quite encased the heart. Beneath the external coat of the aorta, just at its commencement, was an extravasation of blood about the size of a shilling. About half an inch above the aortic valves were three or four punctures, such as would have been made by the needle; through the whole thickness of the outer wall of the artery, and within a quarter of an inch of each other, one puncture being about one-sixteenth of an inch long, and as if enlarged by the pulsation of the artery while the needle was fixed in it. Both lungs were much congested, and contained very little air. The other organs examined were healthy.

The following is an account of the removal of a uterine tumor by the process of enucleation, as recommended by Dr. Atlee:

The patient, a married lady aged 50, had been known to be the subject of fibrous tumor of the womb, for upwards of five years. At length the tumor descended into the vagina, and ultimately protruded through the vulva. She was by this time greatly reduced in health and the subject of profuse discharges of mixed blood and pus. At the time the enucleation was first decided on, the tumor occupied the whole vagina, and the os uteri was so high up that it could not be felt. On October 27, Mr. Hine, under whose care the patient was, had her placed under chloroform, and succeeded in getting away a mass the size of an orange. But little blood was lost, and the patient recovered well. Some days afterwards an examination detected the os uteri with the remainder of the tumor growing from its posterior lip. It was now determined to make a second attempt at removal, and to get away the tumor as close as possible to its attachment. This was done Nov. 17. The lady being under the influence of chloroform, the tumor was dragged down by means of hooks. After a short time without much force being applied, the os uteri suddenly

seemed to dilate and the whole mass came away. There was a smartish bleeding for a few minutes, which was easily controlled by plugging. The patient progressed most favorably until the 25th, when a rigor occurred. There was pain and swelling down the course of the femoral vein. Death, probably from pyæmia, took place on the 29th. No autopsy was allowed. The tumor was of the ordinary fibrous kind. The portion which had been within the internal cavity was the size of half an orange, and a deep constriction marked the part where it had been grasped in the cervix. During the operation it had been necessary to break down with the finger some adhesions which connected the tumor posteriorly with the adjacent parts. On examining with the finger immediately after the removal, the os uteri was found widely open and the lining membrane smooth in all parts with the exception of one spot about an inch across at the back. From this spot a nipple-shaped projection hung into the cavity of the vagina, about half an inch in length.

Dr. Simpson, in his excellent lectures on Diseases of Women, makes the following remarks in reference to the employment of iodine injections in ovarian dropsy:

But there are still two questions in connection with the operation that you will be ready to ask me, and which I must endeavor briefly to answer. What kind of fluid, or rather what preparation of iodine, is best adapted for ovarian injections? and, What amount of fluid may or ought at one time to be used?

Quality and Quantity of Iodine Required.—In reply to the former of these questions, the quality of the iodine solution, allow me to say, that the preparation which I have most frequently made use of for the cure of ovarian dropsy, is the ordinary tincture of iodine of the Edingburgh Pharmacopœia. This, as you are aware, is a very strong preparation, containing half a dram of iodine in every ounce of rectified spirit. Fearing lest the alcohol in this preparation might produce its peculiar intoxicating effect on the system, in some cases where there was a likelihood of the fluid being to some extent retained in the cavity, I have used the liquor iodini compositus of the Edinburgh Pharmacopœia instead. This is a much less potent preparation, containing only eight grains of iodine in every ounce of the fluid, along with half a dram of iodide of potassium. It has proved effectual, however, in a number of instances; and may be safely employed when you wish particularly to avoid all chance of the narcotic effects of the spiritous preparation. I have never seen these effects produced to any very alarming extent, even in cases where a large

quantity of tincture of iodine has been used. At the worst the patient is incoherent, or lies in a drunken stupor for an hour or two, but she soon awakes from this condition as the exhalation and elimination of the poison goes on simultaneously from the lungs, the kidneys, and the skin. The alcohol is speedily dispelled; but for some days afterwards the odor of the iodine can still be perceived in the patient's pulmonary and cutaneou exhalations. You can also trace it chemically in the urine. As for the quantity of iodine to be used, that will, of course, vary according to the special case. When the cyst is of large dimensions, you can hardly hope to bring the irritant in contact with the whole of its lining membrane unless a considerable quantity be introduced. From eight to twelve ounces may be required for the larger class of cysts; and I have sometimes injected as much as fourteen ounces at once. For smaller cysts, from four to eight ounces may suffice; but there are probably very few cases where you will succeed in producing any appreciable effect by injecting less than six ounces. The quantity of fluid injected can easily be regulated either by having the glass tube graduated to ounces, or by keeping in a bottle correspondingly marked and measured off.

There is still one point connected with the iodine treatment of ovarian dropsy, in regard to which you must permit me to make one or two remarks before I have done with this subject. I mean

The Mode in which Irritant Injections effect a Cure.—This is a subject that still requires investigation; and to the question, How does the injection of iodine cure ovarian dropsy? different authors have given different replies. Some say that it produces its effect by acting on the walls of the cyst in such a way as to destroy their power of secreting the fluid they habitually poured forth. Others, again, aver that iodine only cures by exciting such a degree of inflammation as leads to the complete obliteration of the cyst and the adhesion of the collapsed and contracted walls. Whatever views have been held, seem to have been adopted merely as a matter of opinion. There is no observation on record, so far as I know, to show what actually happens in case where iodine has produced a cure. My own impression is, that the usual effect of the injection of iodine is complete obliteration of the injected sac by adhesive inflammation. I ground this opinion, *first*, On the analogous effects of the injection of iodine for the cure of hydrocele; and *secondly*, On the direct observation I had an opportunity of making in the case of a patient who had at one time been subjected to the injection of iodine for the cure of ovarian dropsy. The patient I refer to came to me, many

years ago, suffering from a multilocular ovarian tumor, for which she had been tapped several times and in rapid succession, without any better result than the most temporary relief. I injected the most prominent cyst with tincture of iodine. She recovered well, and went home much reduced in size, and showing no appearance of any new development in the tumor. Long afterwards she returned to Edinburg, wishing to be again operated on as before, as some of the secondary cysts had, after a time, taken on a more active growth, and the size of the tumor began to inconvenience her. She was fevered, however, by the fatigue of her journey, became rapidly exhausted, and died without any thing being done surgically to the local disease. On making a post-mortem examination, we found the new cyst inflamed, and covered on the inner surface with patches of lymph; and we could see besides what we supposed to be the old original cyst obliterated and filled up with plastic lymph, which was of a dark greenish color, probably from the permanence of some of the iodine.

We take from the British Medical Journal, of 24th March, the following extract from a communication by Dr. Inman, of Liverpool, on Morning Sickness, Its Significance as a Symptom:

1. Why are pregnant women sick? 2. Why does the sickness occur in the morning? 3. Why does it occur during the early months more frequently than the latter? 4. Why does not morning sickness attend a distended bladder, bowels distended by flatus, ovarian dropsy, or fibrous or other tumors of the uterus, as often as it attends pregnancy? 5. Does morning sickness attend any other complaint? if so, what have these in common with pregnancy? 6. What is the proximate cause? is it to be sought in the stomach itself, the brain, the uterus, or all combined?

In answering these questions, we light upon an interesting series of facts. All pregnant woment do not have the symptom in question; many escape it entirely; others have it at one time and not at another; some of those who escape it have flatulence and other signs of dyspepsia; others, simple faintness. If we dive still deeper, we find it common among town-bred women, and rare among the healthiest of the rural population. We find, as I have had repeated opportunities for observing, that a lady who suffers from it in a town is comfortable the day after she resides in the country, and is ill again the day after her return; and that, for such an one, a prolonged residence in a pure air prevents morning sickness altogether. It is clear, then, that women are not sick simply

because they are in the family way; there is something required in addition to that, to produce the vomiting.

We next note that the sickness is most common in the morning; but it is not generally present so long as the woman is lying down; nor, if the recumbent posture is continued, will it come on. But no sooner is the erect posture assumed, than nausea comes on, and increases until vomiting follows. Now, as we cannot see any material difference in the circulation through the stomach when a person is standing and lying down, we infer that we must carry our observation to some other part of the body likely to be influenced by change of posture.

A moment's consideration points us to the brain, as being the organ most affected by change of posture. A hundred cases occur to our recollection of faintness and sickness being produced in delicate individuals by assuming the erect posture; and we also remember that vomiting is a common sign of "water in the head." But it is a tolerably certain fact that very few delicate people do have morning sickness when they get up; consequently, a change in the cerebral circulation alone will not be sufficient to account for it.

We now attempt to get some further insight into the causes which produce it, by examining under what circumstances it comes on in males, children, and elderly people. A gentleman, with his wife (who was not *enciente*), when crossing the Atlantic, both had this symptom to a marked degree. During the day, they could stand the motion of the steamer pretty well; they never could do so before breakfast. Champagne did more to relieve them than any thing else. The sickness came on invariably, as soon as they attempted to stand up. Mr. W., aged 56, consulted a friend of mine for what he called dry vomiting. It came on regularly every morning as soon as he got up; and he facetiously observed that, if he were a woman, people would say he was pregnant. The man was an habitual spirit-drinker, and indulged heavily over night; and there was reason to believe that he had an ulcer in the stomach. A few days ago, I was consulted by a clergyman living in the country; and one of the most prominent of the symptoms complained of was nausea as soon as he got out of bed, which was very frequently (twice or three times a week) accompanied by actual vomiting; and, as is common in pregnancy, a little mucus alone was ejected, and some flatus. In his case, the disease seemed to be ulcer of the stomach, or atonic dyspepsia. Turning to Dr. Brinton's interesting treatise on this complaint, we find: "Lastly, in those rarer instances in which the act of vomiting comes on quite independently of the ingestion of food, for example, shortly after rising from a

night's sleep . . . . the vomiting, which is often periodic, is frequently connected with habitual drunkenness, especially with the collapse that follows a debauch" (p. 76). The clergyman was on his way to Southport when he consulted me, and he has subsequently called to say that the morning sickness has left him since his residence there.

We may next remark, as a matter of fact, that children and delicate people generally have anorexia in the morning, even if they have not vomiting; and sometimes they are totally unable to eat any thing at breakfast, from a feeling of faintness or sickliness. This is a tolerably sure indication of deficiency of digestive power in the stomach and in the body generally, and is best met by the use of some mild stomachic and fluid food.

When we inquire how much the condition of the uterus influences the vomiting, we find that the sickness is not produced by simple enlargement of the organ; for it is not a common sign during the gradual distention that takes place from accumulation of the catamenia in cases of imperforate hymen; nor is it from pressure in the pelvis, direct or indirect, for the symptom is generally absent from first to last in ovarian dropsy; nor is the sickness produced by growths within the cavity of the uterus, for it is not a common sign in cases of uterine polypus, etc.

We can not lay much stress upon these facts; yet we may remark, that morning sickness accompanies the formation of moles, etc., which are supposed to be the result of an act of generation; and that it also accompanies *extrauterine* pregnancies, as far as we can judge from the few cases recorded, quite in the same proportion as the intrauterine.

In the causation, then, of morning sickness, we infer that "uterine sympathy" does not hold so prominent a place as the formation of a new being. But neither the one nor the other hold sufficiently prominent a place to give to them the most important rank, inasmuch as neither one nor the other produces the sickness, unless other conditions are present.

We ask, next, what these are? As the symptom in question does not occur in perfectly healthy and strong women, we infer that its occurrence depends upon some deterioration of vital power. As deterioration of vital power involves, to a greater or less extent, deterioration in all organs of the body, we infer that, in the cases in question, there is deficiency of vital power in the brain, and in the stomach.

If this inference be true, we shall find that the best remedies for morning sickness will be those which improve the condition of the patient generally, those which improve the steadiness of circulation in the brain, those which improve the

tone of the stomach, those which deaden the sensibility of the organ which has been preternaturally increased by debility.

Of the influence of change of air upon morning sickness we have already spoken. If this can not be adopted, we must act upon the principle, "Diminish the daily work gone through as far as possible, and increase the power to do it."

Henry Smith, the author of a work on "Hemorrhoids and Prolapse of the Rectum," had read a paper before the Medical Society of London, on Painful Ulcer of the Rectum, which we think worthy of the attention of our readers. The following extract exhibits his most important suggestions on this subject:

The lower part of the rectum and the anus are liable to affections of an interesting kind to the surgeon. The numerous breaches of surface of these parts, although varying in place and in extent, are characterized by great pain, dependent in great part on the contraction of the sphincter ani. The simplest form of ulcer is a slight ulceration round the anus, not extending into the gut; the pain in them is only temporary, and when produced by introducing the finger, soon goes off. The principal treatment necessary is cleanliness, two or three applications of solid nitrate of silver, and subsequently black wash or some similar remedy. This form of ulceration is frequently met with in connection with syphilis.

The next form is where the ulcer is partly outside the anus, and partly in the rectum. There is severe pain on passing the contents of the bowels, lasting some time—even for hours—afterwards. There is also more or less discharge of blood; and in all cases, a purulent discharge. On examination, nothing is seen but a pile-like tumor, of about the size of a currant, generally at the posterior part of the anus, with an ulcer at the base. Sometimes the ulcer extends too far into the rectum to be seen; but it may be readily detected by the finger; the act of introducing the finger causing intense pain. The ulcer is generally round or oval, sometimes as small as a pin's head or split pea. Its surface is sometimes gray, sometimes red; the edges are raised. Sometimes there are two separate ulcers. A small ulcer may be hidden by the rugæ round the anus; hence, in examination, it is advisable to have a good light. The ulcer probably arises from a slight breach of surface produced by straining, which is kept up by a want of cleanliness. In other cases, it may arise from a limited abscess.

There is in these cases of painful ulcer a strong action of the sphincter; and it is most likely that in all cases of spasm of the sphincter there is some ulceration. The painful ulcer

is so often attended with piles, that it probably often arises from the ulceration of one of those tumors.

The treatment consists in the use of local agents and of the bistoury. In the milder cases the cure may be brought about by cleanliness, attention to the bowels, and attention to touching the parts with nitrate of silver or sulphate of copper. This should be followed up by the use of lotion of nitrate of silver or black wash; and a bougie may be introduced.

In the more severe cases, a modification of Boyer's operation of dividing the sphincter is generally now adopted. The operation, as performed by Boyer, succeeded in many cases; but the late Mr. Copeland shewed that it is only necessary to divide the ulcer in its long axis; and this opinion has been confirmed by other surgeons. The relief is most remarkable, even at the first evacuation of the bowels. The operation is simple. The bowels having been well cleared, the left fore-finger is introduced, and a straight knife is carried through the whole length of the sore. An assistant should hold the anus open during the operation. Scarcely any dressing is required beyond a dossil of lint dipped in oil, for two or three days. The bowels should not be allowed to act for two days. If necessary, a dossil of lint dipped in a solution of sulphate of zinc will expedite the healing process; and Ward's paste will also be of service.

The principle of Boyer's operation is to bring the parts into as perfect a state of rest as possible. It is analogous to the division of the levator palati in Mr. Fergusson's operation in staphyloraphy, to the swinging of the leg in cases of fracture, and to the application of a splint to the arm and hand in wrist-drop. It may be objected, that the mere division of the ulcer does not carry out this object. The author thought, with Mr. Curling, that, in reality, some of the fibers of the sphincter must be included in the incision; for he had found, on introducing the finger after operating, that the sphincter ani was considerable relaxed, as if some of its fibers had been divided.

Mr. Smith related some cases illustrative of the details of the disease and the treatment; and then proceeded to observe that it is important to make a careful examination where there is a painful affection of the rectum, as the ulcer may readily be overlooked, especially if there be piles. He believed that many females had been treated for uterine disease when, in fact, they were suffering from disease of the rectum. Mr. Baker Brown had already called attention to this subject. The painful ulcer of the rectum is more frequently met with in women than in men, in the proportion (according to Mr. Smith's experience) of at least two to one.

There is one form of fissure of the anus which has not the character of the disease now described, although many surgeons have described all ulcers of the rectum under the name of fissure. The true fissure consists in one or more cracks in the skin or mucous membrane, but not extending into the rectum. Sometimes there is great pain; but, on examination, nothing can be found but a long split. The treatment consists in procuring an evacuation of the bowels, and in cleanliness. It generally occurs in persons who sit much; and therefore exercise is to be recommended. Some moderate stimulation may be sufficient; but incision may be necessary. In conclusion, the author stated that the points which he had wished to bring out were:

1. The painful fissure or ulcer of the rectum is entirely local in seat and origin. It is nearly always situated at the posterior verge of the anus, and nearly always occurs in women.
2. Its existence is very likely to be overlooked.
3. Caustics may be sufficient in some cases; but, in most, incision of the ulcer is necessary for a cure.

Mr. Brown had paid much attention to the subject. The operation of incision was exceedingly simple. For many years he had been unable to make out the cause of these ulcers; but now he believed it very commonly to be the following: They are almost always found posteriorly. If the finger is passed up, there will almost always be found a little pedunculated polypoid growth on the opposite side, which falls down on the ulcer, and keeps up an irritation. If removal of this growth be neglected, the ulcer is liable to return. He believed this to be the general pathological cause. The patients have always a feeling after evacuation as of "sand passing over a red-hot surface"; this confirmed, Mr. Brown thought, his idea. He also referred to the frequency of the ulcer in females, and expressed his opinion that many cases treated for uterine discharge were really cases of reflected affection from ulcer of the rectum. He related several instances of the kind which had come under his notice, and had been treated successfully by operating on the ulcer of the rectum.

Dr. W. R. Rogers had seen several cases of the kind described by Mr. Smith. He agreed as to the intractability of most of the ulcers lying within the sphincter, unless they be treated by the knife. After using the knife, he was in the habit of throwing in a little solution of opium, and then applying a solution of belladonna in glycerine on lint. He had never known a case of supposed uterine affection to really consist in ulcer or fissure of the rectum. In several of the cases he operated on, the pain had been so great that he was obliged to use chloroform; notwithstanding that he understood Mr. Smith and Mr. Brown to operate without it.

Mr. H. Lee thought that confusion was often produced by naming a disease from one symptom. In the present instance, he did not believe that pain was a constant symptom. He had seen cases of ulcer of even long duration, exactly resembling the painful fissure, but without the acute pain. In the cases he had seen, there had been dull heavy pain in the perinæum and down the thighs, with much mental prostration and loss of health. On discovering the ulcer, and curing it, all the symptoms were removed, although they had continued for years. He was not satisfied as to the alleged cause of the pain. He did not often use the knife. As a local application, he recommended tannate of glycerine.

Mr. Price, as far as his reading and practical experience went, thought our pathological knowledge of the ulcer of the rectum very imperfect. He had seen in the course of the day two cases, one syphilitic, the other from a cause which he could not yet assign. In the latter case, he had divided the ulcer and fissure three times, and it had refused to heal. The patient had been brought to him for an uterine affection. He advocated the use of chloroform, to save pain in the introduction of the finger, to ascertain the exact extent of the lesion, and to perform the operation efficiently. If the patients are placed on the left side, as is often done, it is impossible to operate satisfactorily without the administration of chloroform. He confirmed the observation of the occurrence of fissure at the posterior part of the rectum. The disease is very rare in children—if, indeed, it ever occurs in them.

Mr. Gay differed from Mr. Smith as to the name. The disease, he thought, is not an *ulcer*, but a *fissure;* in many cases, the ulcer is liable to be overlooked in searching for a fissure. He agreed with Mr. Lee that the cases differed very much as regards pain. He thought the pain due rather to the idiosyncrasy of the patient than to any other cause. The principle of the treatment is simply that of absolute rest. The same rule applied in deep-seated abscess leading beneath muscles, which, from their not healing, give rise often to the idea that there is diseased bone. In dividing, it is not always necessary to cut through the ulcer itself; it may be sufficient to cut alongside of it.

At the 1st of March meeting of the Harveian Society of London, a paper was presented by A. Toulmin, on the Importance of the Functions of the Skin, in the Pathology and Treatment of Tubercular Consumption. The following abstract of this paper is from the British Medical Journal, of 24th March:

The author commenced by offering, as the proximate cause of tubercle in all cases, the breathing of impure air, and air in so small a quantity as to render it impure, especially during the night. Wherever this was the continuous state of existence, the result must be a deficiency of oxygen in the red corpuscles of the blood, and as the consequence of this, the deposition of plastic fibrine in an incomplete state of oxygenation, and therefore of organization, and thus incapable of being ultimately got rid of by change of matter. It consequently remained as an extraneous adventitious substance in the system, offering to the observer all the characteristics of tubercle.

To explain the discrepancy which appears in the rich (who have no want of oxygen in the air they breathe), being equally subject to phthisis with the poor, he drew attention to the importance of the respiratory functions of the skin, as proved by the almost instant death that occurs on closing the cutaneous pores by artificial means, as by varnishing and gilding the skins of rabbits and other animals; and he observed that, in consequence of the coldness of our climate and other causes, the better classes of society were certainly not in the habit of making the washing the whole surface of the body a part of their daily toilet; and consequently, that the exuviæ momentarily forming on the surface of the skin—the joint production of the sordes from within, combined with the *debris* of the cuticle—soon became more or less impervious, although the individual might be in the habit of changing his linen daily.

As an illustration of this state of skin, the author referred to acne so frequently seen on the face, as being in reality the general state of the skin of a large proportion of society, especially in the earlier periods of life, when phthisis generally shows itself. The free entrance of air, as well as the exit of carbonic acid through the skin, being thus impeded, the same imperfect oxygenation of the blood ensued, as was produced in the poorer classes, by breathing mephitic air. For the removal of this state of skin, the only means of cure were to be found in the instituting a full and free diaphoresis by the aid of artificial heat; the result of which in first softening and then expelling large quantities of inspissated sebaceous matter, after the surface of the body had been washed clean with soap and water, was most surprising.

The use of the hot air bath, as a therapeutic agent, was no innovation on the established practice of the profession, as it was the mode of bathing practised by Hippocrates, Galen and Celsus; and the universality of the practice was shown by the fact that the remains of such baths had been found in every colony of the Roman empire.

If tubercle be imperfectly organized fibrine, then it should be looked upon as a blood disease; and, seeing it is found in other parts besides the lungs, without destroying life, its deposition in them should not be considered as disease either of the lungs or air-tubes, but as an accidental circumstance, killing mechanically, by its ulceration extending to the surrounding lung-tissue. The author called in question the propriety of sending consumptive patients abroad to a warm climate during any stage of the disease; as although, in the later stages of the complaint, when the air-tubes sympathised with the tubercular irritation, a warm atmosphere seemed more congenial to the patient's feelings; still, in the earlier stages, when a cure was practicable, the breathing the open air of our winter (at least, on the south side of the island) was most important. He instanced, as proof that the breathing cold air did not cause the complaint, the fact that tubercular consumption is not to be met with in high northern latitudes.

The treatment of phthisis was considered under its hygienic and medical aspects. Under the former, and particularly in the earlier stages, the patient was recommended to live in a high, dry, and marine atmosphere, on the Downs, rather than under them; to be as much as possible in the open air; to use all sorts of athlectic exercises (avoiding such as accelerate the pulmonic circulation) suitable to the strength and sex of the patients, by which a more rapid change of matter is effected, together with absorption of already deposited tubercle; as well as the deposition of more healthy—*i. e.*, of more highly organized matter. Medically, the treatment was comprised in a few short aphorisms; which were, 1st, The keeping the functions of the skin in healthy action by means of the hot air bath; 2nd, The anointing the whole surface of the skin daily with some oleaginous matter; 3rd, The keeping a local ulceration always patent by means of an issue or seton; and 4th, The use of some one or more of a large variety of tonic and antiseptic medicines: all admirable adjuvants in improving the general health (if selected in conformity with the function most sympathising with and reacting on the disease), but powerless in arresting the specific lesion in question, without the previous "Open Sesame" of the hot air bath, followed by aspersion of cold or tepid water.

The Registration Law.—The bill for the registration of births, marriages and deaths, in the city of Philadelphia, having passed both branches of the Legislature, and received the signature of the Governor, has become a law. It takes effect from and after the 1st of July next, 1860, and is to be carried out under the direction of the Board of Health.

Pharmaceutical Department.

By THOS. E. JENKINS, Pharmaceutist.

CHLORODYNE—

Its History, Preparation, Properties, Therapeutic Effects, Doses, Etc.

History.—Chlorodyne was invented in the year 1848 by Dr. Browne, while officiating in his medical capacity during the prevalence of cholera and diarrhea among the English troops in India, and was introduced to the notice of the faculty in England by him as "a combination of perchloric acid with a new alkaloid."

Preparation.—From Dr. Ogden's analysis, it appears to be composed as follows: "Chloroform, six drams; tincture of capsicum, half a dram; oil of peppermint, three drops; muriate of morphia, eight grains; perchloric acid, twenty drops; Sheele's hydrocyanic acid, twelve drops; tincture of Indian hemp, one dram; treacle, one dram. Dissolve the morphia in the perchloric acid; then add the tincture emp., capsicum, peppermint and chloroform, and lastly, the treacle and prussic acid."

Properties.—Chlorodyne is a volatile liquid, possessing a pungent smell and taste. It is soluble in alcohol, but insoluble in water; but may be conveniently administered in that liquid by suspending it in a little mucilage. The alkalies and alkaline salts decompose it. In color, it is dark brown; and in weight, it is equal to twice its bulk of water. It is anodyne, sedative, diaphoretic, astringent, antispasmodic, diuretic, etc. Unlike the preparations of opium it does not produce headache, giddiness, prostration of strength, nor stupor; but in large doses, and for a constipated state of the bowels, it is liable to produce nausea, which in the former case may be relieved by a small dose of sal volatile, and in the latter by recourse to aperients.

Therapeutic Effects.—The changes produced by this preparation on the system are—1st, a gentle heat at the stomach, followed by a general glow and total absence of pain; 2nd, a calm and refreshing sleep; and 3rd, an increase in the pulse from a "small, weak, thready, hurried, or bounding one to a full, yielding, elastic, natural sort of one, decreasing in frequency of beats as well as resistance, to a healthy condition." Of its powers in the cure of consumption, Dr. Stonehouse remarks: "The cases (among others) in which I have em-

ployed it, have been twelve cases of phthisis; eight of these patients had been examined by other medical men, and had been regarded as genuine cases of consumption, so that the nature of the disease does not rest upon my testimony alone. They were all well-marked cases; for I do not mention several others in an incipient stage. Two of the cases were in the last stage—*i. e.*, cavities had formed in the lungs; two others were bordering upon this stage. The remaining eight were in the second stage, that of softening; in five of these hæmoptysis was a prominent symptom. All these cases have done or are doing exceedingly well. Five of them have quite recovered; the others, with one exception, are in a fair way towards recovery."

Doses.—The dose of this preparation must be regulated according to the nature of the complaint. As an anodyne for febrile, inflammatory, or neuralgic affections the dose is from ten to thirty drops; diaphoretic in cases of coughs, colds, etc., ten to twenty drops; sedative in consumption, etc., twenty to fifty drops; antispasmodic in gout, rheumatism, etc., twenty to forty drops; astringent in cholera, diarrhea, etc., fifty to one hundred drops. It is best administered on lump sugar, and given at intervals from every half hour to every four hours.—*The Chemist and Druggist.*

ON THE DETECTION OF PHOSPHORUS.

BY DR. FRED. HOFFMAN.

The author has instituted a series of more than one hundred and fifty experiments with Mitscherlich's method for detecting phosphorus. He has mixed the phosphorus mass of matches in different preparations, with food cooked in various ways, with beverages commonly used, and with medicines in a liquid, soft and plastic state, and kept the mixtures for a variable length of time. The presence of phosphorus, it will be remembered, is established by the phosphorescence imparted to the aqueous vapors on distilling the liquid or liquified mixture, and the distillation of the phosphorus is increased by the addition of sulphuric acid, chloride of sodium, sugar, etc., whereby the boiling point is made to approach that of phosphorus.

In the place of Mitscherlich's apparatus, the author has constructed a more simple one, which is easily prepared and readily taken apart. It consists of an ordinary flask, connected with a receiving bottle by means of a glass tube, which passes about eighteen inches through a glass cylinder, filled with cold water. A long, straight tube conducts the gaseous

products from the bottle. The lamp and flask are surrounded with dark paper, and about three-fourths of the glass cylinder. The operation is best performed in a dark room.

The phosphorescence of the liquid increases in intensity with the consistence of the liquid and the quantity of the phosphorus. The gas bubbles are luminous, rise in the mixture, and apparently burn upon its surface with a bright flame. With the temperature the light is increased; a photosphere fills the flask, rises in the tube, and moves up and down within the cooled part. Sometimes only a column or a luminous ring appears stationary at the point where the vapors are cooled, and a luminous fog or sparks gradually sink into the the receiver, or a sudden, frequently-repeated lightning is observed. If the heat is raised too high, or the cooling is insufficient, the luminescence passes through the long gas-tube, at the mouth of which the gases take fire, if the volatile oils from cruciferæ (mustard, etc.,) have been present.

Coffee, mustard, smoked meat, highly-seasoned food and beverages, and medicines containing odorous gum-resins, volatile oils, musk, castor, camphor, chlorine, etc., have the property of covering the odor of a small portion of phosphorus; minute quantities, which yet produce the symptoms of gastro-enteritis, may not be recognized by the odor in the contents of the stomach. The reaction is not prevented, except by the presence of much alcohol, volatile oils and mustard. If the quantity of phosphorus be not too insignificant, the phosphorescence is observed, either momentary or constant, at the beginning of the distillation, and after the alcohol has passed over.

The reaction is not interfered with by the presence of ipecac, tartar emetic, magnesia, hydrated oxide of iron, musk, castor, opium, albumen, neutral acid, or basic salts and double salts, volatile organic acids, chlorides, iodides and sulphides, and by free acids; but iodine, chloride and bichloride of mercury in considerable proportion, and metallic sulphides in the presence of free sulphuric acid, and particularly oleum cinæ, (artemisiæ,) interfere with or prevent the reaction.

Numerous experiments, by distilling the brain of various animals, blood, albumen, casein, fibrin, legumin and other protein compounds with diluted sulphuric acid, yielding not the least photospheric reaction.—*Archiv. d. Pharm.*, 1859, Oct., 22–26.

Grease an Antidote for Arsenic.—M. Blondlot, of Nancy, France, has called attention to a very curious toxicological fact, namely, that greasy matters have the power of diminishing considerably, the solubility of arsenious acid, either in

pure water, or in acid and alkaline liquors. Thus, in contact with grease, the poisonous properties of arsenious acid are very much decreased, and at the same time, it becomes more difficult to render its presence evident by chemical reactions. A very slight quantity of greasy matter, according to M. Blondlot's experiments, reduces the solubility of arsenious acid to one-fifteenth or one-twentieth of what it is when in a pure state. This explains why arsenic, taken in the form of powder, remains sometimes for a considerable interval in the body without producing injury; it explains also how it is that, in cases of poisoning by arsenic, this substance has not been readily detected in such portions of the body or the aliments which contain much grease. It seems to teach us, also, that cream, for instance, is an excellent antidote for arsenious acid. Morgagni tells us, in his writings, that, in his time, the Italian boatmen used to astonish the by-standers by swallowing, without hurt, large pinches of arsenious acid, having taken the precaution beforehand, of drinking a quantity of milk, or eating some greasy matter. As soon as the public had retired, they got rid of the poison by vomiting.—*London Photographic News.*

Santonin and its quantitative determination in troches and other preparations made by confectioners, and others outside of the profession, can easily be obtained by means of chloroform, which dissolves the santonin, and leaves the sugar untouched. The solution is filtered upon a watch-crystal of known weight, and evaporated. The increase of the weight of the crystal is that of the santonin contained in the troches. The substance to be examined must be dried well before being submitted to the above test. It was ascertained at the same time that at ordinary temperature twenty-three parts of santonin are dissolved by one hundred parts of chloroform.—*Wittstein's Vierteljahresschrift*, vol. 8, p. 581.

Sanitary Science.—What sanitary science has done, and has yet to do, may be gathered from the following facts. The science is quite of modern date; but since the application of its simplest principles, the cleansing of streams, drainage of houses, and introduction of pure water, the following evidence of benefits resulting has been given us: In Liverpool the mortality had fallen from 37 in the 1000 to 27; Bradford, from 28½ to 22; Gloucester, from 27 to 24. Taking an average of nineteen towns which had been treated in this way, it was found that the death rate dropped from 28 in the 1000 to 21. Croydon was taken in hand scientifically some time ago; and since then an average of 196 lives have been saved in the town

every year! The mortality among the pauper infants and pauper children in the metropolitan unions has been enormously reduced. In the Military School at Chelsea, a death-rate of 9 in the 1000 has been brought down to 1 of 4000. The female prisoners at Brixton, who live under sanitary rules, are three times as healthy as the poor needle-women of London; and at Pentonville, notwithstanding the allowance to be made for moral depression, the death-rate is only one-third of that prevailing in populous towns. But still there is a great work to be done; for as we are told, authoritatively, that at least 100,000 persons die annually in these islands at premature periods and by preventible deaths; and at least 1,000,000 more are wasted and debilitated from similar causes. Talk of war, indeed! why, what battle or contest ever wrought havoc like this; havoc, be it remembered, not occurring at intervals, like an exceptional calamity, but carried steadily and incessantly through the ranks of our population? And we have still to remember the lesson taught us by the Crimean war. In that war we lost altogether 30,800 men; but of this number, 5,00♪ only were slain by the enemy. All the rest, 15,800 soldiers, fell victims to privation and disease.—*Med. Times and Gazette.*

A New Plaster.—M. Pasquier, of Roxbaix, has exhibited to the Academy leaves of gutta-percha mixed with peroxide of iron, which he has long employed in the dressing of fractures and complicated wounds. The leaves soften in boiling water, and may be then readily applied around the limb, around which they become moulded, and lose none of their consistence through the heat of the body. After amputation he uses nothing but this gutta-percha—neither charpie, compress, or bandage.—*London Pharm. Jour., from Dingler's Polytechn. Journal.*

Charcoal.—Charcoal surpasses all other substances in the power it possesses of condensing ammonia within its pores, particularly when it has been heated to redness. It absorbs ninety times its volume of ammoniacal gas, which may be again separated by again moistening it with water. It is by virtue of this power that the roots of plants are supplied in charcoal exactly as in humus, with an atmosphere of carbonic acid and air, which is renewed as quickly as it is abstracted.—*Liebig.*

Chloroform in Sleeplessness.—Fonssagrives recommends (*Bull, de Ther.* LVI, p. 401) 5-10 drops of chloroform in mucilaginous mixture, in agrypny when opiates are ineffectual or contra-indicated.

CORRESPONDENCE.

Messrs. Editors: An obstetrical case has recently occurred in my practice, so entirely novel to me, that, thinking an account of it might interest some of your readers, I have prepared the following brief narrative:

Sometime during the month of February, Mr. A——, of this city, called at my office to consult me in relation to his wife's health, and to engage me to attend her in her expected accouchment. He informed me that she was at that time about eight months advanced in her pregnancy; that about five years before, she had given birth to her first and only child; that soon after that labor she began to be troubled with a "falling of the womb," and that she had suffered greatly from that cause ever since. He said that on all occasions of unusual exertion, the womb would come down between her thighs, when a little effort on her part, combined with the recumbent posture, would restore it to its proper position. From the commencement of the existing pregnancy, this state of things had been productive of more annoyance than ever before, and for a month or more the womb had constantly protruded and could not be returned. On my expressing doubts about there being such a prolapsus uteri at that stage of gestation, he said, that whatever it might be he was certain, that for some weeks, there had been a rounded red mass protruding fully two inches into the world.

As he did not desire me to visit his wife at that time, I knew nothing further of the case until the evening of March 23rd, when I was called to attend her in labor. On my arrival, at 9 o'clock, the patient informed me that about half an hour before she had the first intimation that her labor was at hand, by the rupture of the membranes and the discharge of the waters. This was accompanied by a slight pain, and was followed at intervals of about ten minutes by others equally mild. The examination, which was made immediately, revealed the following condition:

Protruding from the vagina at least two inches, there was an irregularly rounded mass, having a pretty firm, fleshy feel, large enough, as it seemed to me, to fill a medium sized tea-

cup. On making an examination of the exterior of this mass, I found that it extended into the vagina, which it filled pretty fully. I could pass my finger entirely around it, thus showing that it had no connection with the vagina, as I at first supposed. On passing my finger up by the side of this unusual *tumor* nearly as far as I could reach, I encountered the head of the child occupying its usual position at the beginning of labor, that is, usual so far as the pelvis is concerned. The head was felt through the walls of the uterus. By passing my finger into the vagina on its different sides, and carrying it up to the fœtal head, it appeared as though there was a firm tumor attached to the uterus at and around the os, which extended down through the vagina, filling it pretty fully, and projecting two inches or more beyond the vulva, where it was enlarged so as to overlap the labia. An examination of the summit of the external portion of this mass revealed a depression; it did not at first appear to be an opening, but by making a little pressure, the finger entered a canal, and with a slight effort at dilatation, it passed through the whole length of the mass until it reached the uncovered fœtal head—it will be remembered that the membranes were ruptured previously. I was now able to make out the nature of the case. The mass filling the vagina, and protruding beyond it, was the cervix and os uteri, both much enlarged. At that stage of the labor the child occupied the body of the uterus, neither the os or cervix being dilated. The os internum, or the point of communication between the canal of the cervix and the cavity of the body, was not larger than a dime. That portion external to the vagina consisted mainly of the lips of the os uteri, and was greatly enlarged, these being at least one inch in thickness, but the walls of the cervix were not as thick. They became gradually thinner as they neared the body, not being much more than one line at the junction of the two. I can not illustrate the unusual condition of the uterus existing at the beginning of this labor better than by adducing a comparison, which forcibly occurred to my mind at the time. It seemed as though there was a cylindrical tumor attached by its upper extremity to the os uteri, from which it extended down through the vagina to a point two inches and more external to the vulva, where it was expanded to a rounded,

irregular mass. During the two hours which succeeded my first examination, the labor progressed slowly, that is, the pains were infrequent and of but moderate severity, and yet very marked changes occurred in the condition of the parts; the os uteri had become somewhat dilated, showing the two lips at least one inch in thickness, while the commissures did not exceed a line and a half, the canal of the cervix had become more capacious, admitting the index fingers of my two hands, and thus I was able to aid in the process of dilatation. At the expiration of another period of two hours, still greater changes had occurred. The os uteri had dilated to about the size of a half dollar, the cervix had entirely disappeared, and the head of the child had advanced to a position which it occupied for nearly three hours. The occiput having emerged from beneath the arch of the pubes, had passed through the labia, while the face pressed firmly against the perineum. During this period the os uteri was slowly dilating. On account of its being entirely outside the vagina, I was able to use both index fingers in my efforts to forward the dilatation. The pains were excessive, and sometimes it seemed as though the whole uterus was on the point of descending, with and around its contents. But after about three hours had been occupied in this last process of this labor, viz., the dilatation of the os uteri, the necessary yielding of the thickened and hypertrophied mass took place, and the delivery immediately resulted. After the removal of the placenta, I found that the patulous and flabby mass still remained outside the vagina. On carrying it back to its normal position, which was easily effected, I found that the thick lips of the os formed a pretty large tumor in the upper part of the vagina; but observing that there was no tendency to a return, I left, with directions that the recumbent position should on no account be departed from. Three weeks have now elapsed, and my patient is still in bed. Occasionally there has been a slight prolapsus, occasioned by the necessary movements connected with the alvine evacuations.

B. R. PALMER.

DIPHTHERIA.

Although this disease has for several years been occupying a large share of professional attention, both in Europe and this country, and much has been written in regard to it, but little of what has been published has fallen under my eye. I shall therefore be compelled to rely mainly upon my own limited observations of the disease for the views I shall communicate. This I regret the less, as it is, after all, upon the independent observation of a large number of individuals we have to repose for the eduction of facts and opinions, which ultimately enter into the construction of the true theory of every disease.

Whether this disorder belonged to former ages, or is of recent origin, I shall leave for the decision of the medical archæologists upon the one side, and the novelty fanciers on the other. It is nevertheless true, that no very definite description of the disease was given prior to that by Bretonneau, about a quarter of a century ago, though older writers have alluded to membranous, or pellicular exudations upon the fauces in epidemic sore throat. Nor is the antiquity of the disease a matter of any special moment, since the various and widely differing views entertained in regard to it, show that its true nature is still a legitimate object of study.

While the profession generally is settling down into fixed and determinate views of its nature and pathology, there remain some respectable physicians who are erratic, dubious, or skeptical. Many consider it membranous croup, in epidemic form, presenting sthenic or asthenic traits, as it may accidentally attack a robust or an enfeebled subject; others confound it with scarlatina; others still regard it as identical with the Angina of Fothergill.

Of the near relationship between diphtheria and membranous croup, there can exist but little doubt; and the analogy, or similitude, runs in such striking parallelism, that it is much easier to perceive the *diacritica signa*, than to describe them. Each affection has its physiognomy, carrying its differential features to the eye, yet difficult of description. Like typhus and typhoid fevers, near akin, but differing in essence and intensity.

Croup is slow and insidious in its invasion; a slight catarrh, trifling cough, and almost unnoticed febricula are

often the only forerunners of sudden and most threatening suffocation. The patient, until the terrible dyspnœa occurs, is cheerful, eats well, is amused by his play-things, while his watchful mother is unconscious of danger; while diphtheria is most usually abrupt in its invasion—a rigor, followed by a sense of extreme debility, head-ache, back-ache, general bad feeling, well marked febrile reaction, accompanied or soon followed by soreness of throat, not unfrequently delirium, and, sometimes, a loss of consciousness, form its characteristic features.

Croup is almost wholly restricted to children, while diphtheria attacks, with but little discrimination, children, youths and adults. Croup seeks its subjects mainly among those of lymphatic temperament, diphtheria seems indifferent as to constitutional preponderance.

The victim of diphtheria, feeble from its invasion, becomes more and more so. In croup the strength is well maintained, yielding as the disturbance of respiration increases, and in the ratio of its increase.

In diphtheria the complexion is earthy, dusky, or pallid; in croup, moderately natural until the lividity of approaching asphyxia begins to be pronounced. In croup patients recover rapidly from the moment the membrane is expelled or destroyed, while convalescence from diphtheria is almost always slow, and not at all certain, even after the period of exudation has passed. But few accidents pertain to the convalescence of croup. Exhaustion, abscesses, and paralysis frequently happen in this stage of diphtheria. Both diseases are accompanied by the formation of false membrane.

In croup it is always found within the air passages; in diphtheria, not uniformly so. In the former the membrane seems firm and plastic. In the latter, less so, almost aplastic; at least it is much more separable from the mucous membrane, not so highly organized, and more readily torn. It resembles a croupal membrane which has been submitted to maceration.

The foregoing comprise the distinguishing features between membranous croup and diphtheria, which in my opinion constitute them distinct diseases, as much so as measles and scarlatina, small pox and varicella; the one, croup, seeming to be merely local, producing constitutional disturbance; the other

evidently a general disease, developing or accompanied by a local affection, the extent and intensity of the local disease, however, not always being commensurate with the gravity of the general disturbance.

In some of the most severe cases the local manifestation is but slight, deglutition and respiration go on well, and were it not for the unmistakeable membranous exudation within the cheeks or upon the fauces, and the dark red color, and slight intumescence of the faucial mucous membrane, these cases might readily be taken for severe typhus. Yet, notwithstanding the distinctiveness of the diseases, it is not a little curious that, during the prevalence of diphtheria in my region, I have my cases of croup remarkably multiplied. During the twenty years and six months, ending last July, I had seen but three cases of true croup. Since then, I have seen four well defined cases. This fact, with those who contend for its identity, might seem significant. They might claim from it that the phenomena and termination are determined alone by the accident of the condition of the patient at the moment of attack. But a careful comparison of the patients attacked by croup, with those who had diphtheria, has led me to a different conclusion. I have found the former more cachectic than the latter, so far as the eye could determine it, less disposed to plasticity, and less phlogistic.

This is true, not only of the four recent cases, but even in a more marked degree in the three former. Between scarlatina and diphtheria there are fewer features in common. Both are attended by fever, both involve the throat, and both are sometimes mild, sometimes malignant. The fever of scarlatina is generally active; of diphtheria, of lower grade. The faucial membrane in the former disease is usually of a bright red color; in the latter, much darker. In the former it may become ulcerated or dotted with an ash-colored secretion; in the latter, covered, or partially so, with a well-defined membranous exudation. In the former, the tonsils most usually become inflamed or swollen; in the latter, but slight variation in volume occurs. Scarlatina is an eruptive disease, followed by desquamation. Diphtheria claims no such characteristics. Not unfrequently there is a commingling of epidemics of the two diseases, and often a blending and conversion of types, in

the same subject. These are the facts, doubtless, which have most powerfully conspired to confound the diseases. When the epidemics are commingled, or running through a region concurrently, great circumspection is required to make up the diagnosis; and when there is blending of types, great fatality may be feared, so also when there is a succession or conversion of types.

I have found diphtheria strikingly fond of successions; although not fearful of an encounter with the strongest constitutions, it never seems better pleased than when an opportunity presents itself of engrafting upon constitutions enfeebled by recent attacks of scarlatina, measles, catarrh, fevers, or indeed any of the acute affections which have occurred during its prevalence. The extent of the territorial range of the disease has not been fully defined. In our own country it has been found upon the shores of the Atlantic, and the Pacific, and in almost every region between the two oceans. Accounts of its ravages in parts of Asia and South America have reached us, and Europe seems to have been its favorite home. As is apt to be the case—with a new disease, or an old one dignified with a new name—many vague and indefinite, indeed marvelous, ideas have been entertained in regard to it. Mystery has hung around it. Development of new pathological laws have been attributed to it; and in the minds of the people, as well as of not a few physicians, it has been magnified into a terrible pest equalling the cholera, and outstripping the Egyptian plague. After all, however fatal a certain proportion of the cases may prove, it is, fortunately mild and harmless in a large majority of the attacks. And though, now and then, in certain situations a large majority of the cases may prove grave, it is nevertheless true that most of the epidemics are mild. Like most febrile diseases, diptheria is readily divisible into the mild, severe, and malignant varieties, being formed into three classes merely by the varying intensity of the attacks.

The seizures are usually abrupt. A slight rigor or a decided chill is for the most part the announcement of the attack. Occasionally lassitude, general bad feeling, or a sense of inordinate prostration precede the rigor. With the commencement of the attack, a perception of marked debility is

uniformly present. These symptoms are common in all the varieties, only varying in intensity and duration.

In the simple form the succeeding symptoms are head-ache, uneasiness of back and limbs, fever, furred tongue, dark red color with slight intumescence of the mucous membrane of the fauces, palate, and tonsil. From the second to fourth day, the characteristic membranous exudation of a dusky or yellowish white color shows itself upon one or both tonsils, about the fauces, or within the cheeks, which, after a limited duration of three or four days, spontaneously disappears, leaving the mucous membrane smooth and less angry in appearance than prior to its formation. During the first three or four days the skin is pretty uniformly hot and dry. It now becomes soft, perspiration ensues, and it remains moist until convalescence is established. The bowels, though inclined to constipation, are readily moved by the mildest laxatives. The dysphagia, though noticeable, is by no means troublesome. Considerable swelling of the lymphatic glands about the jaw and neck has been generally observed, and much stress has been laid upon it as part of the disease, yet it is strangely true that in the epidemic, through which I am passing, this condition has been absent in a majority of cases, and not been prominent in any. The average duration of the simple variety is from six to nine days. Convalescence favorable, though attended by more debility than usually consequent upon acute diseases of equal violence. The severe variety follows the same course of development, but augmented in intensity. From the beginning the debility is more marked, the pains more violent, the general functions more disturbed, and the pulse more frequent. Nausea and vomiting are often present; constipation exists; not unfrequently delirium, and sometimes loss of consciousness ensues. The throat presents a darker hue, and the pseudo-membrane is earlier and more extensively formed, the dysphagia is greater, the tonsils more swollen. This variety includes the croupous, in which the membranous exudation extends into the larynx, producing the croupal voice, cough, and dyspnœa, and belongs more to children. Its duration may be stated at about the same as the simple, perhaps a day or two longer. The prognosis in this division is by no means favorable, as in the former. In the cases in

which the membranous exudation occurs within the air passages, a fatal result sometimes happens within from two to four days, by partial asphyxia, superadded to the prostration pertinent to the disease itself. Yet, in a majority of the cases, when not too much meddled with by local appliances, the exudation will soften and be expectorated, or will become separated and thrown out by the fifth or sixth day, leaving the larynx free from mechanical obstruction, and prone to speedy restoration; the case proceeding as if there had been no croupal complication.

The malignant type is more pronounced from the beginning, for the first constitutional impression is so potent, that the functions of life are almost subdued. A feeble and rapid pulse, disturbed respiration, vomiting, slight hemorrhage, and great muscular relaxation or rigidity of muscle, with low delirium, or loss of consciousness, and extreme dysphagia may constitute the chain of symptoms. Soon the throat and cheeks, and sometimes the lips, become covered with the pathognomonic membrane (but of a darker color than in the other varieties), which has a fetid, disagreeable odor. In these cases extreme debility early ensues, and death not unfrequently closes the scene within from two to four days, sometimes even earlier, and before the membranous exudation or other local manifestation of the disease shows itself.

The foregoing are the prominent traits of the different types of the disease presented in the epidemic, which has been lingeringly prevalent in this part of Jefferson county, since the first of last August.

The prominent ideas gathered from this protracted, yet not very extensive, observation of the disease, are:

1. That it is an essential disease, dependent upon, or, at any rate, involving material alteration in the blood.

2. Though an essential and general disease, it almost invariably makes a local development in form of special inflammation of the mucous lining of the throat, or air passages, proven by a membranous exudation upon the true membranes of those sites.

3. That, like typhus and typhoid, and the exanthemata, it is in a notable degree a self-limiting disease, proven by a general tendency to recovery, after a certain time.

4. That the local element of the disease, the mouth and throat inflammation, together with the aplastic exudation, betrays a decided tendency to improvement after the fifth or sixth day, and will, in a large majority of the cases, cease altogether, unless the parts are too much disturbed by meddlesome interference, with local treatment.

5. That the treatment should be eminently conservative, spoliative, sustaining, or expectant, as the particular case may demand.

At a not very distant day I hope to resume the subject, discuss the several propositions offered, and consider the complications, sequalæ and treatment in detail. E. D. Foree.

Messrs. Editors: Your Journal for Sept. 1, 1859, contained some strictures on the Report on Medical Education, made to the Indiana State Medical Society at its last annual meeting, which were felt by many members of the Society to be very unjust to the Report, and to the committee which presented it, as well as to the society which adopted it. Yourselves and Dr. Fry have already given your readers several articles on the subject, and two points yet remain, on which your readers are not fully informed. Hence this article.

Your strictures charge—on page 549 of your 1st volume—"the members of the Indiana State Medical Society" with "denouncing that profession (the medical) as jackasses and ninnies," and, at the same time, urge these very jackasses and ninnies to "enlighten the community!" Also, with "coarse denunciation of professors." Having promptly denied the correctness of each and all of these charges; asked for specifications of language in the Report to sustain them; pointed out portions of the Report which expressly disprove them; and shown that the offensive term "jackasses," together with almost the entire paragraph in which the term occurs, was, *not* the language of the reporter, but of some of the professors at the last annual meeting of the Am. Med. Hssociation; used in fact by one of its distinguished members, who boasted that *he owned* a medical school, etc., etc.; without any acknowledgement *to your readers* of these errors. It has seemed necessary to say thus much to set that matter right.

On page 548 your strictures say: "the general principles of of the Report * * * on Medical Education having been con-

curred in, we naturally turn to a brief examination of those principles. Their gist seems to lie in the necessity for legislative action, a longer course of study in the medical schools, and efforts on the part of physicians to enlighten the community." That your readers may see for themselves how immensely this exhibit of the general principles of the Report falls short of either correctness or fullness, I have endeavored to prepare a synopsis of them for your pages, but find that so difficult, that on that account, and for the further purpose of affording them an opportunity to see the true animus of the Report of the Society which adopted it, so grossly misapprehended and in consequence misrepresented by your strictures, I offer for insertion the Report of 1857, which was incorporated into that of 1859, as shown by the following from page 20 of the Transactions of 1859, viz:

The prominent outlines of a rational system of medical education, in the judgment of your committee, were presented clearly and forcibly in the Report on this subject in 1857, and published in the transactions of that year. Your committee adopt that report, and now present it to the Society for adoption or rejection—as it has never acted upon it—the Report having been referred to the Committee on Publication by the Society before, and in anticipation of its reception.

These pages exhibit the general principles of medical education adopted by the Indiana State Medical Society in 1859, and were cordially approved by a number of prominent medical journals, including the Am. Jour. of Med. Sciences—when first published, nearly three years ago. It is discussion of these principles that the committee and the Society desire, and *not* whether medical professors are immaculate, or some of them less worthy than they ought to be; nor, whether the committee are well-bred gentlemen, or, their report "a proof, if one were needed, that a higher grade of education is really required," by the committte at least. With a view to *such* discussion, if you will point out a single statement in this Report which is not true as to fact, or sound as to principle, it will afford me pleasure to give your readers the evidence as to fact, and the argument as to principle, which have seemed conclusive to my mind. If either can be set aside, or rebutted, such statements or principles will be promptly and most cheerfully yielded, or rejected by me. But, to the Report referred to, which is as follows, viz:

While it is a matter of sincere congratulation with every true and worthy member of our noble and beneficent profession that the proper education of its members, both as to the standard of general and of professional education, and the best means of securing it, has enlisted so powerfully the attention of so many of the best minds of our age and country; it is, also, matter of deep regret that the discussion has resulted, as yet, in so little tangible substantial improvement, in either elevating the standard, or in providing a more rational system of medical education. It is nevertheless true, that very much good has been done in the investigation and partial exposure of the defects of the one, and the errors of the other. And your Committee can not forbear expressing the opinion, that one great reason that no more has been accomplished, is found in the controlling influence that prominent teachers in our profession have exercised in the discussion. For, it is believed that many considerations influence them to more partial views of the subject than others equally qualified to judge.

Your committee, regarding the subject as one of vital importance to the profession, have given it much consideration; and while it is impossible for them, in the limits of this report, to discuss fully the entire subject in all its relations and bearings, they propose to glance briefly at some of the considerations which, they think, call upon this Society to take an out-spoken and decided stand in favor of a high standard of medical education, and a rational system of means for its attainment. In doing this, they must necessarily bring under review the present prevailing standard and system. If in their progress they should seem to use any roughness, let it not be forgotten that the true surgeon is never deterred from a thorough exploration of an injury, however harsh to the unprofessional bystander, or even the patient, some of his most valuable means and methods of investigation may appear.

The first consideration which they mention is, the auspicious circumstance that we have no organized, operative manufactory of medical diplomas in our State to contend with—and therefore can come to the consideration of the subject free from this most dangerous trammel to fairness—that we will have merely to construct, and not to *reconstruct*, a system of medical education. But it is mainly in the high claims of humanity upon our profession, in the noble and beneficent position it assumes to occupy towards the afflicted, that we find the most weighty considerations for the adoption of a high standard and a rational mode of medical education. In order to bring these considerations to bear, we must view somewhat narrowly the present standard, in comparison with a proper one—and examine closely the present system in comparison with a rational one.

We may safely assert that no other profession requires either so high order of talent or so great degree of cultivation of it, as the proper practice of medicine and surgery. Yet what multitudes enter the profession with but a very small amount of either! Your committee believe that the day can not be remote, when reformation in medical teaching *must* and *will* be effected. The progressive spirit of the age has already done much for the improvement of our noble profession. But the love of money—the indisposition, so common, to labor for that which does not produce an immediate return in coin—the seeming innate thirst of men for humbuggery—and the superlatively complex character of medical science, have conspired to prevent *medical teaching* from receiving that benefit from the advancing spirit of the age which has accrued to the literature and the art of the profession. The difficulties in the way of reformation are certainly numerous and great—perhaps beyond our conception—yet every ennobling sentiment of the profession demands that they be diligently sought out, encountered with determination, and completely vanquished. The numerous *isms*, *specialties*, and even *burlesques* of systems of the profession are slowly and unintentionally, but certainly, preparing the way for reformation; and your committee are persuaded that many of the best minds of the profession are sighing, "God speed the day!" Such will not always remain silent. Though oppressed with other more immediate, and therefore *felt* necessary labors, they will, after awhile, speak out in tones not to be disregarded, demanding *at least equal* educational facilities with other professions. These should encourage and emulate each other in their efforts to discover and lay bare the causes of the existing state of things, and to point out and apply the appropriate remedies.

In the further prosecution of the subject, your committee propose to consider: 1st, the present condition of medical education; 2nd, the causes thereof; and 3rd, the remedies therefor, including time and mode of application.

1. The present condition of Medical Education. Is it rational? Is it what we wish it were? Is it not *just what we permit it to be?*

The first unsound point in the current system, to which your committee would direct attention, is one of fundamental importance, viz: The entire want of care in the selection of candidates for the study of the profession. The peculiarities of mental endowment, usually govern parents and guardians in the choice of the legal or clerical profession, or one of the numerous trades of life for their children or wards, but seldom is thought of with respect to our profession. In truth, there is too much foundation for the charge, that "Doctors are usu-

ally made of the refuse children," *i. e.*, of such as are not likely to succeed in other professions, or even in agricultural or mechanical pursuits. No other profession or pursuit affords freer scope to the very highest powers of observation, of analysis, of reasoning, than ours. None demands a larger amount of *common-sense, practical talent.* Genius, in the ordinary sense of the term, will find here but little scope. Theoretical medicine may furnish fields for the display of genius, the creative powers of the imagination; but practical medicine, judiciously pursued, demands close, patient, persevering observation, and rigid, logical induction. The prevailing professional sentiment, as well as the popular opinion, must undergo a material change, before our profession can command the talent necessary to make professional education what it should be. In other words, *we must have suitable timber.*

2. This *suitable timber must be thoroughly seasoned*, before it is wrought into professional form, *i. e.*, preliminary education must be thorough and complete. What multitudes enter the profession, without any adequate stock of general, or professional knowledge, or discipline of the mental powers! And it is probable that no other single defect operates more extensively to the detriment of the profession, than *want of mental discipline*—unless it be want of conscientiousness. In the almost infinite variety and relations of the functions, physiological and pathological, of the human frame; in the frequently obscure, and often contradictory symptoms present, and the large number and great diversity of the remedies from which to select, sharp powers of observation, and of reasoning, a sound, well-poised, self-reliant judgment, with *familiar* knowledge of anatomy, physiology, pathology, materia medica, and therapeutics, are indispensable to the well-equipped physician and surgeon; and just here, it may not be out of place to intimate the belief, that it is because *the people* can not detect and expose deficiencies of this kind, that so many incompetent men fill the ranks of our profession. These indispensable traits and equipments of the true physician, can not be obtained without thorough, and previously acquired mental discipline. Yet students are too often allowed to enter on the study of medicine with little or no more preliminary education, and often with less than if about to enter a grocery store. And while your committee rejoice in being able to refer to a resolution of this Society, among its very first acts, imposing on its members the "duty to discourage young men from the study of medicine, who have not the ability, etc,"—see p. 9, of "Proceedings of the State Medical Convention of Indiana," for 1849—they can not forbear

expressing the fear, if not the conviction, that this resolution is practically disregarded by some of those members of the Society, whom, for their general devotion to the interests of the profession, your committee delight to honor, whose erroneous example will therefore prove the more pernicious.

3. Professional education, properly so called, is both defective and erroneous in many particulars. The time appropriated to its attainment, is far too limited. The schools, or, more properly speaking, the money-making machines, into which far too many of our medical schools have degenerated, pretend to require two years of study, prior to attendance upon their lectures and dissections; but who has heard of an inquiry on the subject, of a candidate for matriculation, in the last ten years? And who is not aware that many *commence* the study (so called) of medicine, by attendance on a course of lectures? But the time is too short, were it rigidly required, and even industriously and judiciously employed. No man can secure a good knowledge of anatomy, physiology, pathology, materia medica, and therapeutics, principles of diagnosis, obstetrics, medical chemistry, pharmacy, and medical jurisprudence in three years, how diligent soever he may be. And your committee do not hesitate to assert, that the more faithful the student, the more sensible will he be of the insufficiency of the time, even at the end of a *four* years course of study.

But again, the *mode* of study, if mode that can be called which has no system whatever, is utterly *irrational*. With confessedly the most intricate, complex, and we may add, uncertain, of all the sciences, and the most difficult of all the arts for his study and practice, the student usually enters a physician's office, has access to his books and a few medicines—is, perhaps, advised somewhat respecting his reading—occasionally sees a case of disease or an operation, or more properly speaking, sees the subject of the disease or operation, for he has not the requisite knowledge to enable him to observe the one or the other to any purpose; and in a majority of cases, this constitutes the sum total of instruction received in the office. Could there be a more palpable perversion of language than to call this *instruction?* Are ministers, or lawyers, merchants or artizans of any kind made by *such* instruction?

Not less objectionable, if not indeed more reprehensible, is the course of instruction, so called, in our medical schools. Here, from 100 to 500 students—as many as possible, for the greater the number the more money is made—are collected, and without regard or inquiry respecting their preparation for attendance upon lectures, and without classification according to the stage of study in each individual case, they are shown the way to the different lecture-rooms. If they choose, they

may hear daily six lectures of about fifty minutes each, for a period of from six to twelve or fourteen weeks, on as many different topics, in crowded rooms, either too hot or too cold, and with but a single daily intermission of two hours. Is a knowledge of any other science obtained in such a manner? And what are the lectures? Instruction prepared by the lecturers and not elsewhere attainable? Why, no! Ninety-nine hundredths of it all can be found, equally as well expressed, if not better, in the various text-books of the profession. Not a single teacher has the time, in the four months term, to even gallop over the ground belonging to his department. Very much matter of equal importance to that exhibited to the class, is necessarily omitted, and much more is so hastily run over, that but feeble impressions of it are made upon the student's mind, and those feeble impressions are necessarily confused and often erroneous. Four of these lectures follow each other in succession before the dinner recess of two hours. Wearied nature demands all of this recess for rest and refreshment, allowing no time for arranging the matter of the lectures, and still less for properly digesting it. The same may be said of the supper recess. Then follows three hours in the dissecting rooms, usually in the midst of filth, surrounded by noise and confusion, each student is associated with several others in the order of matriculation, who may or *may not*—most generally the latter—care a groat for any benefit they may derive therefrom, save making the entrance to the green-room, to which it, or the $10 it costs, is the key. And a single demonstrator to half a dozen or more of such classes! Of these demonstrations in either the dead-room or the lecture-room, the most that can be said is, that they are a *clumsy farce*—of little or no advantage to either professors (except the dimes they put in their pockets) or pupils, and bringing serious disadvantages to the latter, among which may be mentioned deceiving them into the supposition that they are acquiring a knowledge of the science of medicine, the waste of their time and money, and the formation of bad habits of study and observation—all leading necessarily to superficiality of attainments and to irrational routinism in subsequent practice. And, lest self-culture, under the guidance of common sense, might release the student from this slavish bondage, the chains must be riveted by the requirement of attendance upon a second course of lectures, which are yet not indeed *another* course, but merely a repetition of the first, after an interval of twelve months! The so-called *quiz* of second course students is little else than a farce, for it is notorious that the idle, if possessed of sufficient nonchalance and a certain pertness, succeed equally with the most studious. The same may be

said of the green-room examinations, as also that the graduation fee of $25 or $30 blinds too many and great defects, and largely aids in imposing on the community a host of unqualified physicians and surgeons, who, though often conscious of their defects, have yet neither the moral courage to confess them, nor the mental vigor to remedy them; and following the example of not a few professors, they degenerate into *respectable quacks* or undisguised mountebanks.

Finally, our system of instruction in medical schools is based upon the idea of the "almighty dollar" as its chief corner-stone, and is, therefore, rotten in a vital point. Hence, the first object is to get a class, and the schools have vied with each other, *not* in giving the greatest possible amount of professional instruction in a given time, and at a given cost, but in enticing the largest number of students into their respective halls. Hence, a few weeks' attendance often passes for a full course, provided only the full course is paid for. Hence, also, almost every candidate for the degree is graduated. The examinations having degenerated into a mere form, each institution easily satisfying conscience with the plea that its examinations are as rigid as its neighbors', *and can not be more without driving students to other and no better schools!*

Our Code of Ethics beautifully says of practitioners—and the remark is equally applicable to teachers—"Medicine is a liberal profession, and those admitted into its ranks, should found their expectations of practice upon the extent of their qualifications, not on intrigue or artifice." What a different state of things would soon exist were this precept faithfully observed by all our profession! To be sure, they do occasionally, in each lecture term, denounce "quackery" and compliment orthodoxy; but expressions of this kind so evidently belong to the order of "soft soap," so lavishly used by dealers in small wares, that they have no weight whatever. Place distinctly and honestly before the students of our medical schools, the true nature of our profession, and the proper objects and motives of its pursuits, and your committee hazard nothing in saying that three-fourths of them will confess to themselves, if not to their fellows, that such considerations never entered their minds. Hence, more than from all other sources, flows the almost resistless torrent of real empiricism (in the garb of true orthodoxy) and distrust of scientific medicine that is sweeping over our land, and driving in disgust from the profession many of its brightest ornaments—exalting not a few of the baser sort, and entailing debility of constitution, actual disease, and deformity or death upon multitudes, at a cost far greater than sufficient, if properly expended, to qualify and support a number of competent medical men equal to the wants of community.

But we are admonished to pass on to the consideration of the remedies for this confessedly deplorable state of medical education. The subject has been much discussed of late years; and although it is thus shown to be a matter of great interest, and though many good suggestions have been made in the course of the discussion, no satisfactory system of measures for the removal of the evils, has yet been devised. This result your committee regard as attributable mainly to two causes: 1. To the want of a *rational, practical, common-sense investigation* of the whole subject, untrammeled by existing modes and means of education, and looking to *fundamental reform* rather than to mere patchwork; and 2. To the opposition of the existing medical schools, energized as it is—often, no doubt, unconsciously—by pecuniary and professorial interests, and supported as it is by the fast spirit of the age, to the adoption of a more rational system. "Young America" is not willing to plod along the slow and toilsome way marked out by sound reason, but is bent on rushing into the practical arena, regardless of the necessary (on their plan) absence of qualification for its responsibilities and duties; and we are sorry that we are compelled to say that professional teachers yield far too much to this fast spirit of "Young America."

What are the requisites for the proper discharge of the weighty responsibilities and arduous labors of the practice of medicine and surgery? And how can these requisites be best attained in a reasonable degree? Proper answers to these two inquiries will, your committee think, indicate the kind of education demanded by the interests of the profession and of the people, and also of the best method of securing it.

The first indispensable requisite in the physician is good mental endowments, combined with at least fair physical powers. In mental endowments we include intellectual faculties, both perceptive and reflective, and the moral sentiments; and by *good* mental endowments, something above mediocrity, and the more above, the better. Inattention to this point constitutes the first and one of the greatest defects in the current system of medical education. It is as if rotten limestone were used for the foundation of an immense granite superstructure. A few minutes consideration of the extensive range of scientific study required, and the superlatively intricate nature of the science of Life, Health, Disease, and Remedies, *practically*, and not abstractly, must satisfy any reflecting mind that a man of ordinary mental endowments can never attain respectability in the profession, *if the proper tests thereof are fairly applied.* Fair physical powers means the ability to endure the irregular labor, repose, meals, exposure to vicissitudes of weather and temperature, and, above all, the severe intellectual

and emotional efforts inseparable from the proper discharge of professional duties.

The second requisite is the *thorough training* of the mental endowments and physical powers to such a degree as will fit their possessor for their prompt, skilful, and sustained exercise in any and all emergencies. The safety of life, of health, or of limb, often depends on the possession of this requisite. And, alas, how often is the one or the other sacrificed to the want of it in professional men! The considerations already referred to in proof of the radical necessity for good mental endowments, show still more conclusively, if possible, the importance of this second requisite.

The third requisite is such full and thorough instruction in the science and practice of medicine and surgery, and the collateral sciences, as will make the student complete master of the great principles of the science, and give him a degree of expertness in their practical application to the details of the "ars medendi." Few, if any, respectable members of the profession will dispute the correctness of these views. But when we come to consider how these requisites can best be attained, considerable disagreement may be found to exist, and it becomes us, by a careful study of the whole subject, in the exercise of a spirit of liberality towards those who differ from us, *to aim at the discovery of the truth*, for its intrinsic value, and as a basis of greater unity of sentiment and concert of action amongst the members of the profession.

The first of these requisites can be secured only by firmly rejecting from pupilage candidates of inferior mental endowments or physical powers. This will be found more difficult of accomplishment than would seem probable at first glance. For you must first ascertain the want of this requisite by the candidate, and then convince him of the fact, not only in opposition to his self-esteem, but also in opposition to the fixed purpose of himself or his advisers that he shall and will be a doctor.

The second requisite may be secured only by a long course of hard study. The length of time may vary in different cases, but several years, at the least, are necessary to the formation of fixed habits of close observation of facts and principles, and rigid logical induction. No other profession presents subjects for investigation surrounded with like inherent difficulties, nor does any other afford so numerous or great opportunities or temptations for partial and defective observation and fallacious reasoning. The fundamental principles of the science of theology and of law are plain and easily understood, and are uniform in their manifestations and application. Not so in our profession. The subtile principles

of Life, in its endless variety of manifestations, influenced by innumerable surroundings—some obvious in their influence, but many more, obscure—and by the more mysterious action of mind and emotion, are the subjects of investigation, not only in their normal and regular, but also in their abnormal and irregular conditions. Thus, while the true physician is the fittest representative of the highest style of profound ratiocination, the poorest reasoner may pass amongst the unprofessional as respectable. The first resolution of the Committee on Preliminary Education in the American Medical Association of 1847, although looking in the right direction, evidently falls short of the mark. Mental and Moral Philosophy, Botany, Natural History, Inorganic Chemistry, Geology, Zoology, and ability to read freely the Latin and Greek classics, or, better still, some of the best scientific and professional works in those languages, and speak the French and German languages, ought to be added to their list, in order to afford the mental training necessary to insure the promptness, skill, and perseverance in the use of the mental powers, and of the materies medendi, almost daily required of the true physician and surgeon. This requisite can not be generally secured until a public and professional sentiment shall have been created demanding it, which, we must confess, does not now exist; and if we act on the principle of "taking things as we find them," never will exist, unless we adopt that other principle, that we must constantly strive, with all our might, to make "things" what they should be. Let us exercise common sense, and the characteristic benevolence of our profession, in the thorough and repeated discussion of the matter, both in and out of the profession. Let us candidly acknowledge our deficiencies, and do all in our power to lessen those of our immediate successors, by straining the standard as high as possible for every student coming within the reach of our direct or indirect influence. By pursuing such a course, we will induce the public to demand a higher standard of mental culture for medical men, and the demand *must precede* the supply. Here we want *education* rather than *instruction; mental development* primarily—*instruction* AS A MEANS *of mental development.*

The third requisite can be easily secured by a rational course of study, of three or four years' duration, by one who possesses the first and second requisites, and by none other, however long the period of professional study. When we consider the great number of organs in the human frame, the entirely concealed position of the most important of them, their numerous and complex relations and dependencies, their individual, relative, and combined functions, and the external agencies affecting them; the variations, congenital and acquired, of the

life-force in different individuals; hereditary influences; the numerous subtile and latent causes of disease; the almost infinite variety of remedial forces and agents; the Protean forms and vague character of diseased manifestations, etc., etc., it must be obvious that we have not named too long a period of time for professional study. But this course of study *must be a rational one;* and we proceed to indicate what we mean by that term.

There should be a thorough study of but one or two subjects only, for some time, say Anatomy and Physiology as one, and Materia Medica, Medical Chemistry and Pharmacy as another. The student should carefully read the best text books; examine as much as possible the dead and the living subject; learn by actual inspection the natural and physical properties of the Materia Medica, and perform chemical experiments. On all his studies he should be fully and closely examined by the preceptor—daily, if practicable. After sufficient progress is made in these branches, add Pathology to the one and Therapeutics to the other. Still later, at appropriate periods, add Institutes of Medicine and Medical Jurisprudence, Practice, including Obstetrics and Diseases of Women and Children, and the principles and practice of Surgery. Let the student have a preceptor to guide him in his studies, to examine him, aid in unraveling intricacies as they arise, and instruct him in the details of practical diagnosis, dressings, and pharmacy, for the first year alone; and in conjunction with the lecturers during the last three years of study.

Let us have a Medical School, entirely and amply supported by the State, and open to all her citizens, possessed of suitable preliminary qualifications, free of charge. Let it be as fully manned with teachers as you please, but with only two, or, at most, three lectures daily, of one and a half hours each, preceded by half an hour's *real* examination of the students on the subjects of previous study, with the application and use, by both teachers and pupils together, of all the dressings and instruments used in surgery. Let the lecture term consist of not less than nine months in the year, and three terms constitute a course; *i. e.*, let each professor occupy nine months in each year, for three years, in going consecutively through his department, devoting, say one-third of the last term, to a review of the whole course. The time of the students out of the lecture room should be diligently employed in the study of the subject-matter of the lectures—practicing the application on each other of the various bandages, splints, etc., etc., preparing medicines, and filling prescriptions. Clinical practice, either in hospital or private practice, or both, should be seen and participated in, during the last year at least. Then

let us secure some such legislation as this, viz: Let the State Medical Society choose a Board of seven medical examiners, from men eminent in the profession, not residents of the State. Let the Board meet at the capital once or twice annually, for the public, oral examination of all candidates for the future practice of medicine and surgery. Let certificates be issued to those found to possess the necessary qualifications authorizing them to practice the profession, and allow none hereafter to enter upon the practice without such certificate, under heavy penalties.

Such, your Committee regard as a *rational* course of preparation for the practice of a profession vastly more intimately related to all the earthly interests of the entire human family than any other. And they can not believe it, in all its essential features, either *unattainable*, or attainable *only at some remote period*, *unless* the members of this Society, and other worthy members of the profession in this State, prove derelict of duty. Shall we go to work rationally and energetically, *determined* to attain so desirable and so glorious a result? Or shall we sit down, fold our hands, sigh at the magnitude and glorious character of the object, *wish* it were attained, and put forth no rational great-sustained efforts for its attainment? The old system, irrational as it evidently is, will struggle hard for life. Many who live by the craft, will cry out as of old, under similar impulses, "Great is Diana of the Ephesians." And we may find some, who ought to be earnest coadjutors, wholly indifferent, if not actual opposers. But our noble profession—noble in its nature, its origin, and its aims—degraded only by the unworthiness of its professed representatives—and poor, bleeding, suffering humanity call in trumpet-tones, and in agonizing wails, upon us to go forward, in the spirit of the "Great Physician," to the accomplishment of the glorious and benificent work before us.

Resolved, That in view of the immense importance of this subject, its thorough investigation be earnestly recommended to every member of this Society, and to all local medical societies in the State; and to this end,

Resolved, That an extra session of this Society be held in this city [Indianapolis], on the second Tuesday of January next [1858], and the two days following, for the discussion of this subject in connection with that of legislation—and that non-medical men of the State who feel interested, be cordially invited to participate in the discussion.

Resolved, That a committee be appointed to address a circular to one or more physicians in each and every county in the State, urging the formation of county or district societies—

where such do not already exist—and the more perfect organization, and more efficient working of those already formed, and suggesting a closer union of all local societies with the State Society, in the hope thereby of more effectually "maintaining union, harmony, and good government among the members of the profession, and promoting its interests, honor, and usefulness."

Resolved, That it be earnestly recommended to all the members of this Society, to require of candidates for pupilage, good mental endowments, and preliminary education equal at least, to that recommended by the American Medical Association before cited—and also, more thorough *professional* qualification than merely sufficient to secure the diplomas of many of our medical schools.

All of which is respectfully submitted on behalf of the committee.

In conclusion, allow me to say that the conviction is spreading in the profession that radical changes are needed in the current system of medical teaching, and must, and will soon be made. And, therefore, every member of the profession who desires its greatest honor and usefulness, ought to examine the subject carefully and dispassionately, with a view to securing a system which will commend itself as *rational;* and, let the journals, and the profession through the journals, speak out their well considered views and plans. Thus a system may be devised which will command the general concurrence of true physicians, although individual objections may exist to some particular features. C. F.

Indianapolis, April 20th, 1860.

Suicide in Massachusetts.—We append the subjoined statement from the *New York Observer*, of March 29th, 1860:

In the year 1858, 91 suicides occurred in Massachusetts, and the number has not greatly varied for the past five years. For the seventeen years and eight months ending Dec. 31, 1858, 1089 persons have taken their own lives in that State.

The Belgian Government has instituted a medal, to be conferred as a mark of distinction on those physicians who distinguish themselves by their patience and courage in times of pestilence and other calamities.—*Nashville Journal.*

Editorial Department.

The State Medical Society of Kentucky held its ninth annual meeting at Bardstown, on the 18th and 19th days of April. Socially, the meeting was regarded as extremely agreeable, but as a convocation, having for its object the "cultivation and advancement of medical science and literature," it cannot be viewed as an exponent either of the wishes or capabilities of the true lovers of professional advancement in our State. But two reports were offered, one on "Improvements in Surgery," by Dr. B. R. Palmer, the other on "Medical Biography," by that always loyal and working member of the Society, Dr. Spillman.

The following gentlemen were elected officers for the present year: President, B. R. Palmer, of Louisville; 1st Vice President, S. M. Hobbs, of Mt. Washington; 2nd, Vice President, G. H. Luckett, of Owensboro'; Recording Secretary, S. M. Bemiss, of Louisville; Corresponding Secretary, E. O. Brown, Owensboro'; Treasurer, W. H. Hickman, Bardstown.

The following members were appointed delegates to the American Medical Association for 1860: Drs. W. C. Sneed, C. P. Mattingly, E. D. Foree, J. W. Singleton, S. M. Bemiss, C. H. Spillman, J. D. Jones. Full power was vested in the President to make additional appointments and to supply vacancies. The Kentucky State Society is entitled to a representation of about two hundred members, so that those who desire to go as delegates to New Haven can obtain credentials by application to the President.

Should the New Publication Committee desire us to continue to publish the Reports of the Committees, the address of the retiring President, Dr. C. P. Mattingly, shall appear in our June issue.

The tenth meeting of the State Society will be held at Owensboro', on the third Wednesday in April, 1861.

We must apologize to some of our contributors for retaining for a future No. some interesting communications. Dr. Fishback's communication reached us at a late period in the setting up of the present No., but knowing that the committee of which he is a member desired a full discussion of the subject before the meeting of the New Haven convention, we gave space to the report by deferring to a future issue several articles which would otherwise have appeared in this No. We are influenced to give this report a preference not only by the intrinsic importance of the subject itself, but by a desire to aid in every appropriate manner the labors of the committee who prepared it, for the advancement of medical education.

We have received the first No. of the Georgia Medical and Surgical Encyclopedia, edited by Horatio N. Hollifield, M.D., and Thomas W. Newsome, M.D., and published at Sandersville, Georgia. It is a monthly of forty-eight pages, presenting a neat appearance, and exhibiting proofs of editorial ability. We place it with pleasure upon our exchange list. But while we extend a welcome to this new adventurer upon the field of medical literature, we must painfully record the loss of one of our oldest and most valued exchanges. The Peninsular and Independent Medical Journal has been discontinued for want of patronage and adequate remuneration. During our editorial career we have had opportunity to observe the tardiness and negligence of our profession in extending aid and encouragement to enterprizes which have in view no other object but the promotion of the interests of members of that profession, but we confess that we were not prepared to hear that so zealous and efficient a co-laborer as the Peninsular could be adjudged by the medical profession of our country to be unworthy of its hire. It is a sad commentary upon the lack of interest which the community of physicians evince towards the higher aims of their profession, that so well conducted a journal should have met with so poor an acceptance that it must die of inanition. We shall take to ourselves counsel from the fate of our late excellent confrere, for we know not how soon a similar condemnation may be meted to others of its survivors. Though as to ourselves, we do most

earnestly implore our friends, when they think us worthy of death, to terminate our career by some more speedy method than this tedious, terrible, torminous starvation. We would, if permitted to choose, prefer the fate of the martyr Stephen. Could you not stone us to death, but with such delectable missiles as California nuggets?

Dr. N. Bozeman has removed from Montgomery, Ala., to New Orleans, where he is to take charge of a Woman's Hospital. His professional accomplishments and reputation will guarantee him success in his new home. We also learn from private sources of information, that the profession and people of New Orleans are bestowing upon our friend Dr. T. G. Richardson that high appreciation due to his merits.

We take the following from the American Medical Gazette for May:

Southern Medical Quarterly.—This is the title of a new periodical by Prof. Daniel F. Wright which is to take the place of the Nashville Medical Record. The Nashville Medical Bulletin and Hospital Gazette is to be issued monthly, in newspaper form, as the organ of the Shelby Medical College. Dr. Wright is a medical scholar of no mean pretensions, and has editorial abilities of a high order.

We solicit from our readers, especially those of Kentucky, accounts of the prevalence and characteristics of diphtheria in their various localities.

The State Medical Society of Indiana convenes at Indianapolis on the 15th instant. We have received an invitation to be present, and intend to profit by it. Perhaps we may be able in a future No. to inform our Kentucky readers why it is that our friends and neighbors across the river can maintain for years a vigorous and excellent State organization, while ours is so languishing and ineffectual.

Hart & Mapother Lith. Louisville, Ky

yours truly

J. Bonis

1844

MONTHLY MEDICAL NEWS.

VOL. II. LOUISVILLE, KY., JUNE, 1860. NO. 6.

MEDICAL BIOGRAPHY.

Report on the Medical Biography of Kentucky. Submitted to the State Medical Society, at its Meeting in Bardstown, April 18th, 1860. *By* C. H. SPILMAN, M.D., *Harrodsburg, Ky.*

PREFATORY REMARKS.

Whether, to address ourselves to an inquiry in itself pleasing, to minister to the instruction and social elevation of others, or to evolve information substantially useful in the practical affairs of life, be our object; a more appropriate theme could not be selected than that of Biography.

"Man," says one, "is perennially interesting to man." And, in nothing is his inherent sociality more clearly evinced, than in that unspeakable delight he derives from the contemplation of human character, and the solution of the great problem of human existence.

"The proper study of mankind is man." This ancient aphorism, consecrated by time, and vindicated by long experience, is as pregnant a truth to-day, as it was when penned by the philosopher who first conceived it. It commends itself alike to our inclination and our judgment. It challenges our approval, as the most ready avenue to a practical exemplification of another apothegm, nearly allied to it, "know thyself."

That the Great Architect of our nature has, not only bound together the happiness and duty of his creatures, but indisolubly fastened their interests one to another, in the relation of a common brotherhood, is a truth which challenges alike our assent and our admiration.

If asked, why it is that man is so interesting to man, and the contemplation of his life, and character, and trials, and triumphs, affords so much delight; we answer, because we

which we labor, and the mistakes and inaccuracies to which we are liable, in attempting, without record, or written document of any kind, or even an intimate personal acquaintance with the subjects of these sketches, to draw such likenesses as will be recognized and fondly cherished by their relatives and friends. The lapse of time is incessantly thickening the veil which is spread over past persons and events, and the lineaments cannot be easily distinguished or brought out, either by the eye of discernment or the hand of honesty.

It will be our endeavor to avoid the absurdity into which biographers have not unfrequently fallen, which seeks, by a fanciful delineation of character, studiously to conceal the faults, and display the virtues of the character under review. It is useless to disguise the fact, that much of our biographical literature is rendered valueless by its fictitious character, exhibiting too little regard for truth in its delineations.

What hope have we, other than fallacious one, of being profited ourselves, or of benefitting others, unless we copy faithfully from the inspired volume of truth. Reality, whether fair or homely, has an inspiration which gives it immeasurable worth. It is remarkable how some slight, perhaps homely incident, if real and well-presented, will fix itself in a susceptive memory, and lie ennobled there, "silvered over with the pale cast of thoughts," with the pathos which belongs only to the dead. For all the associations of the past are sacred to us. All that the grave incloses is holy. Even from those whose lives were tarnished with the grossest follies and faults, we see as from a faithful mirror, in varied shades, and most lively imagery, that severe conflict with this "heavy, unmanageable environment," "wherewith all hearts labor oppressed," and whereof we are but too deeply sensible, in our terrestrial state. By none is the victory complete, until this heavy environment is shuffled off. Our friends, whose lives we propose to study, have been withdrawn from the conflict, and the battle-field has become a silent, awe-inspiring "*Golgotha.*" We are left to fight on, and we shall fight unprevailingly until we, too, are emancipated from these fetters. And when we shall have been withdrawn from the conflict, the faithful record will, perchance, note many of our weaknesses and follies. Truth is always injured, and its power for good impaired, by

the slightest connection with fiction. It is our purpose, therefore, without fear or favor, without partiality or prejudice, to represent men and things as they really are; that virtue may receive its just tribute of praise, and vice meet its deserved censure and condemnation. It is by contrast that we learn to estimate the moral quality of an action. Conceal from view the shady side of human life, and the sunny side loses much of its beauty and attractiveness. A proper view of vice, with all its disastrous tendencies, is calculated greatly to highten our pleasure in the discovery, and to stimulate our ardor in the pursuit of the paths of virtue; and thus the very errors and vices, as well as the wisdom and virtues of others, will be rendered beneficial to us.

And now, gentlemen, we are about to review the lives of other men; but let us not forget that our own concerns us much more. Our fathers were; we are. They have fought the great battle of life; we are still in the conflict. The curtain has dropped and hid them from our view; our little scene is going on, and must likewise speedily close. Should we thus approach this subject, with an honest desire to learn lessons of instruction, whether from the weaknesses and follies, or the wisdom and virtues of Octuro, they will indeed prove to us, though dead, speaking and pleasing companions.

The period is fast approaching when Time itself shall be swallowed up; when Esculapius, and Hippocrates, and Boerhaave and *we* shall all be contemporaries; when the mystery of Providence shall be cleared up, and the ways of God, oftentimes so inscrutible, fully vindicated to men. In humble and confident expectation of that great event, let us endeavor to live with a constant reference to its solemn realities, "redeeming the time because the days are evil," that when we, too, are called "to throw off this mortal coil," the example we shall have set while living shall be worthy of imitation, and our memory embalmed among the great and good of earth.

BIOGRAPHICAL SKETCH OF PHILIP TRAPNALL, M.D.

The family of Dr. Trapnall, in Maryland, descended from English ancestors, long established at Staffordshire, England. The male portion of the family have generally been, and still are, ministers of the Established Church.

Quite a number of the Vincent family, from which the Dr. was a lineal descendent, through his grandmother, were also distinguished ministers of the Established Church. William Vincent, Bishop of London, a distinguished critic and divine, Philip Vincent, Bishop of Durham, and Admiral Vincent, a distinguished naval commander, were second cousins of the doctor.

His grandfather emigrated to this country, from Staffordshire at a very early period, during our colonial existence.

Vincent Trapnall, his father, was a farmer in Baltimore county, Md., where the Dr. was born on the 4th of January, 1773. It may be said with truth, therefore, that he was nursed in the lap of the revolution, and received all his early impressions during that stormy period.

After having received all the mental training which parental care and a good neighborhood school could impart, he was sent to school, at the age of fourteen, at Annapolis, where he completed his preliminary education, which was of a very high order. He graduated in the medical department of the University of Pennsylvania in the spring of 1796, at the age of twenty-three. He practiced medicine at Hagerstown, with flattering success and great acceptance, the two succeeding years, as the cotemporary and intimate professional associate of Dr. Thomas Dorsey.

He now resolved to gratify a wish he had long indulged, that of emigrating West, which he effected in the fall of 1800, by locating in Harrodsburg, where he remained until his death, a period of fifty-four years. He had not been long an occupant of his new field of labor before he found himself in the midst of an overwhelming practice. His masculine vigor of intellect, and superior literary and professional attainments, at once placed him in the foremost rank of the profession. He acquired an exceeding wide range of practice, often going to Danville, Lancaster, Versailles, Lexington, and occasionally Louisville, on professional duty.

His cotemporaries, whom he often met in practice, were Dr. Eph. McDowell, of Danville, Dr. Louis Marshall, of Woodford, Drs. Pindall and Ridgeley, of Lexington, Dr. Benj. Mason, of Lancaster, etc.

It is said by those intimately acquainted with his practice,

that he possessed remarkable insight into the nature and character of disease, was exceedingly accurate in his *diagnosis*, and rarely ever mistaken in the judgment he formed. So scrupulously cautious was he, that in obscure, complicated cases, he not unfrequently deferred his prescription until a second visit, and a more thorough exploration of the case. Such caution, although highly commendable, is not apt to meet a just appreciation from the non-medical public, who not unfrequently construe it into either indifference or ignorance.

Of anatomy and surgery Dr. Trapnall was fond, and he performed a great number of surgical operations; none, however, that I have been able to ascertain, of note.

I can not learn that he had a partiality for any particular department of the profession; and it is a little remarkable that a man of his peculiar turn of mind had no hobby. His energies seem to have been alike devoted to the interests of every department; and, although practicing in a period when hobby-riding was fashionable, he was remarkably conservative in his views, and cautious in practice. In a word, he may with much truth be styled a medical philosopher.

He accumulated a large and well-selected library, with the contents of which, by close application to study, he kept himself familiarly acquainted; which, however, he generously divided out among his young friends after he retired from active professional life.

I should have stated in its proper place, that, whatever may be thought of the principle, in an ethical point of view—although Dr. Trapnall often met his professional brethren in consultation, and seldom refused, where the patient or his friends desired it, yet the influence of his opinion stands against it as a general practice. He admitted that there might be circumstances under which advantage would accrue to the patient from such professional conference; yet, in a large majority of cases, the chances of recovery would be lessened rather than enhanced, by dividing responsibility, hazarding a variety of conflicting opinions, and disturbing the regular action of remedies.

Having established himself upon a farm, he retired from the active duties of his profession about the year 1818, twenty-two years from the time he entered upon them; a brief, but rather brilliant professional life.

The Dr. has, by some, been thought eccentric; and I am not fully prepared to acquit him of the charge. There was something remarkably striking in his person and manner. He was full six feet two inches high, and remarkably straight, had an air of dignity and independence, often construed into haughtiness, rendering him rather repulsive to strangers. It is said of Admiral Vincent, his kinsman, that he was so tall and commanding in his person, and possessed such an air of majesty, his very appearance excited a feeling of awe in his friends, and struck terror to his enemies.

A large physical stature, and magisterial air, seem to have been characteristics of the Vincent family; and the Dr. inherited his full share of it. He had a handsome person, an intelligent face, and a countenance rather forbidding to those who had not learned to read it.

He possessed remarkable firmness and decision of character, honesty and purity of life, was ardent in his attachments, loved his friends with a devotion bordering on idolatry, would make almost any sacrifice for their accommodation. Of this remarkable devotion to the interests of his friends there are still a number of living witnesses. But, toward his enemies, he was implacable; almost bitter. Were it allowable for us to moralize, or make any reflections, outside of the record, of a conjectural character, we would say that this was the weak point, or easily besetting sin of a man whose life was otherwise almost faultless; against which he has fought many hard battles, and not improbably fought unprevailingly, until finally disencumbered, and made free and pure. A little recital of his own experience would undoubtedly reveal a conflict of which he and the Great Searcher of hearts alone were cognizant, and, concerning which, our only interpreter is our own checkered experience, which is abundantly sufficient to melt and soften down the frost of criticism, and extinguish all acerbity of feeling.

Dr. Trapnall was a member of the Legislature, from the county of Mercer, in 1806–7–8–9; and a reference to the journals of that period will show his efficiency and prominence as a member of that body. In 1812 he was defeated for Congress by Samuel McKee, of Lancaster. In politics he was a warm partizan, even after he had retired from active life; an

uncompromising Whig, always prompt and early at the polls on election day, a duty which, as a good citizen, he felt in conscience bound to discharge.

He was a member of the Episcopal Church, and a very warm sectarian; a zealous stickler for the succession, and one of the ablest champions of Episcopacy in this country; was exceedingly well posted in the history and doctrines of his Church.

In 1828–9 he wrote many articles in defense of the doctrines of his Church, which were published, and replied to by Dr. Clelland. The discussion was a protracted one, and attracted much attention in the religious world. I was but a boy at the time, but have a distinct recollection of the opinion expressed by theologians, of that day, in regard to the ability and adroitness with which he conducted that discussion. It evinced profound scholarship, great depth of research; and furnished the most convincing proof, not only of great versatility of talent, but native vigor of intellect.

In 1806 the Dr. married Miss Nancy Casey, daughter of Peter Casey, at Fountain Blue, Mercer county, Ky., a lady of highly cultivated intellect, and great prudence, who was truly a help-meet to him, with whom he lived forty-five years, raising a large and highly respectable family.

In 1818 he retired from the active duties of the profession, and, establishing himself upon a beautiful farm adjoining Harrodsburg, devoted the remainder of his life to agricultural pursuits. In this position, more congenial to his taste and inclination, he entertained a large number of visitors, for which his fine conversational powers and open hospitality so eminently fitted him.

For a fuller illustration of his peculiar characteristics, I can not do better than to refer you to "Camden," a novel written many years since by John A. McClung, in which the Dr. figures conspicuously under the title of Gen. Lethridge.

On the 31st day of January, 1853, in the eighty-fourth year of his age, he died, as he had lived, in humble trust, and unshaken confidence in Him who is "the resurrection and the life."

Thus lived and died, one whose friends were numerous and devoted; whose history, however, is too prominent, and whose

character too marked and decided, never to have met opposition, or encountered malice; which, however, were disarmed of their power to hurt, by his acknowledged honesty of purpose, and purity of life.

BIOGRAPHICAL SKETCH OF THE LATE JOHN ALLEN M'BRAYER, M.D.

It was not my fortune to have become personally acquainted with the subject of this brief sketch, until a short time previous to his death, and then our acquaintance was very slight. I have spent the last ten years of my life, however, upon the theater of his former professional career, in intimate association and constant intercourse with his friends, who have kindly afforded me every facility for collecting and collating facts relative to it.

The family of Dr. McBrayer descended from Scotch-Irish ancestors, and it is not known by the writer of this sketch, at what time they emigrated to this country. They have been a long time resident in Anderson county, Ky., occupying a prominent position in society.

John A. was born on the 3rd of October, 1817. Activity of mind, and a high sense of moral obligation, characterized his boyhood. At an early period he seemed to regard time as a precious boon which he had no right to misimprove, and which it was his pleasure to appropriate to some useful purpose. His preliminary education was chiefly acquired in private schools. A young man of his eagerness and aptitude stood in no need of the incentives of a college, either to stimulate his ardor or assist his understanding. The extent and accuracy of his information, and the beauty and elegance of his style, evinced the scholar, by whatever steps, or through what means soever he may have attained it.

Our young friend was cut down in the morning of life; yet that brief existence is full of interest, contains much instruction; and, whether as a memento, to be fondly cherished, or a noble example, to be imitated by his surviving friends, should not be permitted to go down into oblivion.

It is difficult to contemplate such a life without a mingled feeling of delight and regret. He lived just long enough to foreshadow a career of usefulness and fame, which would have shed luster alike on his own name and the profession of which he was a worthy member.

Even in boyhood, the activity of his mind, in its eager search after knowledge, was marked. He seemed singularly impressed with the immeasurable distance between right and wrong, evinced a scrupulous regard for truth, and when reached, embraced it with singleness of heart, and held it fast with inflexible purpose.

A temperament of unusual ardor fired his intellect. A spirit, impatient of repose, stirred his inmost soul. Impelled by a desire to compress into so small a compass, the interests and duties of a whole life, as if animated with a presentiment of the brevity of his probationary state, and the momentous interests suspended upon it, intensity, activity and impetuosity characterized his every movement.

John A. McBrayer entered upon the study of his profession under the supervisory instruction of Dr. Dedman, of Lawrenceburg, a gentleman of eminence and deserved reputation in the profession, where he enjoyed every facility for acquiring a thorough knowledge of the elementary principles of the science. After having completed a full course of reading and pharmaceutical training under the instruction of his preceptor, being limited in his means, he established himself, as a practitioner of medicine, in Mt. Eden, Ky., where he practised with success and great acceptance for two years, still, however, prosecuting his studies with vigor, spending his winters in attendance upon the lectures in Louisville.

In the spring of 1842 he received the degree of M.D. from the Medical Institute of Louisville, immediately after which he located in Harrodsburg with a view of making that his future home. At that time it could not be said that there was an opening for a physician in Harrodsburg. The prospect was by no means flattering. The profession was crowded. The business was monopolized by old-established physicians, with whom the public seemed satisfied. Indeed, from the unsuccessful attempts which had been made by a number of preceding adventurers in the same field, it seemed that the business in that department was stereotyped.

It was under these, somewhat discouraging circumstances, that Dr. McBrayer made his *debut* in Harrodsburg, as a candidate for the exercise of the "healing art." His success was complete. In a few months he had acquired a very heavy

practice, and was able to dispute the palm with the oldest physicians of the place. That industry, activity and energy which had marked his pathway from early boyhood, he carried into the walks of professional life, and he did an incredible amount of practice.

While he had a strong hold on the confidence of the affluent and more influential, the poor and humble always found, in him, a heart to sympathize, and a hand to extend relief. Unlike too many, in this degenerate age, he was unselfish in his labors, and rendered gratuitous services with as much seeming cheerfulness and promptitude as those that were more profitable. Few men have ever lived, who, in so short a period, left upon the face of society an impress so striking and attractive.

Dr. McBrayer, as a practitioner, was bold, to a degree, which, in those of less judgment, would have been perilous and unsafe. But regulated and guided by such clear insight, nice discernment and close discrimination as he possessed, his efficiency and usefulness as a practitioner were much enhanced by it.

His career was too short ever to have distinguished himself as a surgeon. He did not reach that period of life, when surgical talent is usually developed. He gave promise, however, of fine aptitude for surgery; and had his life been spared, he would undoubtedly have become distinguished in that department. As an earnest of his future success and usefulness as a surgeon, we are presented with a case of wounded intestines on which he operated, an abstract of which was published in the May No. of the Western Journal of Medicine and Surgery, of 1844. The case gave evidence of such originality, thorough anatomical knowledge, and soundness of judgment, as to call forth a very high eulogy from Dr. Gross.

Dr. McBrayer was also in the habit of operating for strabismus. I am informed by the physicians in the vicinity of Mt. Eden, where he commenced his professional career, that even so early as that, his operation for remedying this defect was remarkably successful: one not only confessedly delicate, but, at that time, novel, in that section of the country.

Such was the laborious character of his practice, and his constant exposedness to the vicissitudes of weather, that in

the winter of 1845 he began to exhibit signs of declining health. He prosecuted his professional labors, however, with unremitting energy during the summer of 1846, oftentimes when pain and debility would have counseled rest. In the fall of that year, admonished of his danger by a conviction that his lungs were the seat of organic disease, in the shape of tubercular deposit, he determined to spend the following winter in the West India Islands. In pursuance of this resolution, he left in November of this year for Cuba, where he spent the winter with the single object of regaining his health. He returned in April of the following year, without any appreciable improvement. He practiced during the summer of 1847, still painfully conscious of his perilous condition. In November of this year he left for Mexico, where he resolved to spend the winter. While there, he was appointed assistant surgeon of the United States army, then in active service there. In this position he acquitted himself with great fidelity and energy, until March 1848, when he returned home.

It now became painfully evident that his disease was of an incurable character, and it had made such inroads upon his physical energies as to render an abandonment of the active duties of his profession a necessity.

It seems that Dr. McBrayer, in the midst of all his other engagements, was in the habit of keeping a regular journal of his life. His Cuban and Mexican journals, two large manuscript volumes, containing a minute, uninterrupted description of his travels and observations, have been kindly placed in my hands, by his brother Sandford, a merchant and distinguished financier of Harrodsburg. They are truly a literary curiosity. Their descriptions—besides containing a great fund of information relative to the geography, natural resources, productions of art, and manners and customs of those countries—for richness of style, fullness of detail, and vivacity of coloring, I have rarely ever seen excelled.

We have here a striking exemplification of that laudable rule of action, which the Dr. had prescribed for himself, as his motto through life: never to idle away a moment of time. Although out for the single purpose of regaining his health, he had not a moment to lose; it is all scrupulously appropriated to collecting and digesting knowledge, which would

avail him in the practical affairs of life. And it is doubtful whether, in the vigor of health, the same time could have been more profitably employed.

After the Dr.'s return from Mexico, his cough greatly increased, and his physical strength was so far exhausted, that he was unable, except at intervals, to attend to practice. But even then, when his strength would admit of it, he visited those who had been so much comforted by his presence, and benefitted by his advice, in days gone by.

In politics, Dr. McBrayer belonged to the Democratic school, of the old Jeffersonian stamp, with much of the conservative element in his constitution, and consequently was neither an active partizan, nor noisy politician.

In religion, he was a Presbyterian, having connected himself with that Church in 1840, just ten years previous to his death. He always maintained a good profession, was unaffectedly sincere and pious, zealously devoted to the doctrines of his Church, yet without bigotry, ardently attached to its interests and ritual, but unselfish and generous in his bearing.

Dr. McBrayer was, throughout his life, in the highest sense a philanthropist. If aught of disaffection towards any one ever disturbed his bosom, he was rarely ever known to give expression to it.

He seemed, as he neared his end, which he reached on the 23rd of March, 1850, to live in a higher, holier region, and to realize, in pleasing anticipation, the unsullied joys of the "spirit land."

It is difficult to contemplate such a life, so peacefully closed, without indulging the spontaneous invocation of one of old: "Let me die the death of the righteous, and let my last end be like his."

BIOGRAPHICAL SKETCH OF DR. JOHN BEMISS, LATE OF NELSON COUNTY, KENTUCKY.

In the subject of this memoir, we have a remarkable example of one who was the maker of his own fortune.

If early destitution could extinguish the fire of genius, and stifle the germ of intellect, our friend would have been overwhelmed with discouragements at threshold of life.

The family of Dr. Bemiss, who descended from Welsh

ancestors, emigrated to this country at a very early period, and settled at Worthington, Massachusetts.

His father, at the commencement of the Revolutionary war, enlisted in the army, and rendered efficient service in our struggle for independence. At the expiration of his term of service, he returned home, broken down in health, and greatly reduced in his circumstances.

John, the subject of this sketch, who was the third of four sons, was born on the 16th day of February, 1773.

In consequence of his father's continued ill health and limited means, he was, at a very early age, thrown upon his own resources.

Even in boyhood, he was imbued with a singular love of letters, and conceived a fixed determination to master them. Having no means for acquiring the first rudiments, he eagerly sought, and embraced the first opportunity, for employment in manual labor, with a single view to that object. With that indomitable energy, which was his distinguishing characteristic through life, he rose superior to every obstacle which stood in the way to his coveted acquirements. Every nerve of a vigorous and well-endowed constitution was strained to the uttermost to achieve his ends. Every leisure hour of this period was scrupulously employed in the study of such books as were within his reach.

The ruling passion of his life, which is rarely ever known to gain the ascendency until a much later period, seemed even now to possess the mastery, for he denied himself all participation in the usual sports and amusements of boyhood, lest they might consume time he had determined to appropriate to more valuable purposes. It was, probably, in this manner he acquired that contempt for all conventional pastimes and amusements, or games of chance, which never forsook him in after life.

It appears from some old manuscripts, to which we have had access by the kindness of his son, Dr. S. M. Bemiss, of Louisville, that the intervening four years from 1789 to 1793 were alternately occupied in some department of business, and attendance upon school. During this period he was under the tuition of Eliphalet Nott, who had charge of the Plainfield Academy, probably the best common school at that time in New England.

At this date, 1793, he seems to have been pretty well advanced in letters, for we find him in charge of a school at Pomfret, Connecticut. In what proportion his time is now divided, between teaching and studying, is not clear. His diploma, or certificate of graduation in Plainfield Academy, bears date the 30th March, 1795.

He now spent two years studying Latin and the higher branches of English literature, under the tuition of an educated gentleman, who had become interested for him by his steady, persevering efforts at self-advancement.

In 1797 he entered the office of Dr. Zachariah Standish, as a student of medicine, under whose supervisory instruction he made astonishingly rapid progress in acquiring the elementary principles of the science.

His certificate of the term of his professional studies, and permission to practice medicine and surgery, bears date June 3rd, 1801.

After three months' practice as an assistant of his preceptor, in the autumn of 1801 he emigrated to Kentucky, and located in Bloomfield, Nelson county, then called Middleburg.

In 1797 he had married Miss Elizabeth Bloomer, said to have been a lady of highly cultivated intellect, polished manmers, and amiable disposition. On his first visit to Kentucky, he had left her with her friends in New York, where she remained for twelve months, at which time he went back, and brought her with him on his return.

The severe habits of early study to which the Dr. had subjected himself, together with the keen powers of observation, had so enlarged his capacity for the acquisition and retention of knowledge, that he had completely mastered all the standard works of his day.

He had amassed such a vast fund of information, and had such perfect command of the resources of the profession, that he at once took a very prominent stand, and acquired, in an incredibly short period of time, a reputation rarely attained by a country practitioner.

Boldness, self-reliance, implicit confidence in the curative power of his remedies, remarkable therapeutical acumen, and a profound sympathy with his patients, mark the outlines of his professional character. He was emphatically a man for

the occasion. The fertility of his resources was almost boundless. And while exhibiting the most unwavering confidence in the saving power of his remedies, and plying them with unwearied assiduity and skill, he had the happy faculty of imbuing his patients with the same unshaken confidence.

It is useless to say that Dr. Bemiss was a very safe and successful practitioner. He had witnessed so many recoveries, against the reasonable expectation of friends, attributable, as he believed, to his vigilance, perseverance, and constancy, that hope never deserted him; nor did he relax his efforts until the taper of life had expired.

When in the hight of his practice, his advice was sought in difficult cases in all the surrounding counties; and even after he had retired from the active duties of the profession, he was retained, throughout a very wide scope of country, as consulting physician, to which calls he always yielded a hearty response. His thorough knowledge of the history and literature of the profession, his familiar acquaintance with the standard authors of the day, his ready comprehension, clear insight, accurate diagnosis, and lucid exposition of a case, attached great weight to his opinions with his professional brethren.

He was courteous and fair in his professional intercourse, candid and uncompromising in his views of practice, kind and generous towards the junior members of the profession, scrupulously observant of the rules of ethics, jealous of the honor of the profession, and uncompromising in his opposition to all professional outlawry. The hordes of empirics and nostrum-mongers who flooded the country in his day, found no mercy or foothold near him. His boldness and bitter raillery were weapons they much dreaded.

Much useless speculation has been indulged in regard to the secret of that strong-hold the Dr. had on the confidence of the public as a physician. Some have attributed it to one trait of his character, and some to another. This, however, is all idle. It was the sum of his whole physical and mental being, the totality of the man; an indomitable spirit, animating and wielding a sturdy, elastic frame, which gave him his

force of character, and great usefulness and efficiency upon the theatre of life.

One more remark in connection with the medical character of Dr. Bemiss, and we dismiss this branch of the subject. We allude to the remarkable influence he exerted over the minds of his patients. There is an air of cheerfulness and confidence, of buoyancy and elevation of spirits, which never fails to meet a response in the bosom of the patient, and enters much more largely, than is usually supposed, into the remedial power the physician is enabled to exert. This rare, but exceedingly valuable, quality, the Dr. possessed in an eminent degree. We take the liberty of remarking here, that if there be any one defect in our present system of medical education more glaring than another, it consists in a neglect to inculcate such an aptitude, and inforce its importance to a successful exercise of the "healing art."

Many of our diseases are confessedly of mental origin, or, at least, largely of mental complication; and in their remedial management, much, very much, depends upon the state of the mind. This, the attending physician, whether conscious of it or not, sways almost at will. This power he exerted over the minds of his patients, Dr. Bemiss was scrupulously careful not to abuse. In regard to a clear insight into the mental constitution, and such moral appliances as are calculated to create and maintain a healthful state of mental excitement, he was peculiarly happy. "You may give me your medicine," said a former patient of his to another physician, "and it may do well enough, but old Dr. Bemiss' smile, as he used to come into my sick room, would now do me more good than all the prescriptions you can make." Few ever attained so high a degree of perfection in moral therapeutics, an acquisition to which we can never aspire with too much ardor and enthusiasm.

Dr. Bemiss was an ardent and excitable politician, and took an active part in the New Court and Old Court controversy. He was an uncompromising advocate of the Old Court policy, and wrote a number of able articles on the subject, which were published in the Spirit of '76, at Frankfort. He had no sycophancy about him; never dissembled; was very decided and open in his attachments and antipathies; not unfrequently made enemies by his openness and candor.

His style of writing is vigorous, clear, concise—not much embellished with flowers. His natural turn was too pointed, and matter of fact, to allow space for either redundancy or decoration. Even in the midst of an overwhelming practice, he wrote a great deal. A number of his addresses on the subject of Masonry, of which order he was a prominent member, are still extant. They glow with that fervor, that spirit of expansive benevolence, which animated his whole life, and breathe of nothing but what is wise, good, and philanthropic.

He was always a close student; retained his love of literature to the last; studied Greek when over sixty years of age, besides keeping himself well posted in all the current literature of the day, except novels, for which he had a supreme contempt.

Dr. Bemiss' religious turn of mind developed in early youth, which grew with his growth, strengthened with his strength, and matured in his manhood, culminated in a desire to assume the office of minister of the Gospel, in which position he thought his facilities for doing good would be enhanced, a consummation which had been his ruling passion through life.

Although he had, in the year 1817, retired from the active duties of the profession, and resigned his practice to the charge of his son-in-law, Dr. S. B. Merrifield, his ardent, ever-active temperament did not allow him to take that repose, which he had probably promised himself previous to his retirement, and he turned his attention to the study of Theology. He was accordingly ordained as a minister of the Presbyterian Church about the year 1830. The duties of this office he continued to fulfill with zeal, fidelity, and great acceptance until his death, which occurred, of apoplexy, on the 29th day of March, 1851, in the seventy-eighth year of his age.

Thus ended a life, full of incidents, which we can not contemplate without the deepest interest. The basis of his character seems to have been an intense fellow-feeling with other men, which prompted him, spontaneously, to adopt the interests, sympathize with the affections, and catch the emotions of all with whom he associated. His moral constitution presented such a combination of deep emotions, and restless vivacity, that he was alike ready to "weep with those who weep, and

rejoice with those that rejoice." The great object of his life, to which his reading, study, and reflection were altogether subservient, was, to explore the springs of human action, and trace their influence on the character and happiness of mankind. In this he was singularly successful, for the alchimy of his fertile intellect, extracted some delight from every subject with which he came in contact. Few ever touched life at so many points. "He surveyed human life, as the eye of an artist ranges over a landscape, receiving innumerable intimations, which escaped a less practiced observer. In every faculty he recognized a sacred trust; in every material object, an indication of the Divine wisdom and goodness; in every human being, an heir of immortality; in every enjoyment, a proof of the Divine benignity; in every affliction, an act of parental discipline."

How must the retrospect of such a life have smoothed and illumined his path-way, even through the dark valley, and and enabled him to triumph while forced to surrender to the last enemy.

"Mark the perfect man, and behold the upright, for the end of that man is peace."

THE SYMPTOMS, DIAGNOSIS, AND TREATMENT OF INTUSSUSCEPTION. WITH CASES.

Report read before the College of Physicians and Surgeons, by DAVID W. YANDELL, M.D.

(Continued from May No.)

Case XXXV.—A man was taken with dreadful colic after drinking a quantity of rum. The pain was much diminished by pressure. Every sort of purgative was given, but without avail. Inflammation supervened, and the patient died. Intussusception, with adhesion, was found at the post-mortem. *Dr. Elliotson. London Lancet.* 1830.

Case XXXVI.—A negro boy aged 17, October 3rd, had intermittent fever; took two doses of calomel. Oct. 5th, Dr. G. had a message that the patient was dying. Found him very feeble; medicine had operated freely; abdomen slightly distended, and somewhat painful on pressure; gradually sunk, and died at 12, midnight. Not suspected to be intussusception. Post-mortem—At about the point at which the ileum and jejunum may be supposed to unite, was found a retrograde intussusception, twelve inches in length, inflamed, and approaching gangrene, but easily withdrawn.—*Dr. Garric. London Lancet.* 1831.

Case XXXVII.—A middle-aged woman had constipation, followed by symptoms of severe peritonitis; vomiting, tenesmus. The bowel protruded at the anus; a portion thirty-nine inches in length was withdrawn by the surgeon and the patient made a good recovery.—*London Lancet.* 1826.

Case XXXVIII.—A healthy man, aged twenty-seven, the subject of double inguinal hernia and an abdominal hernia just above the right groin, was attacked April 1st, without evident cause, with pain in the abdomen, vomiting and tenesmus. No strangulation of either of the hernias was discoverable. V. S. purgatives and enemata were all of no avail. The symptoms increased in severity. On the 5th, feculent vomiting set in; on the 6th recovery seemed impossible. ʒiij. of quicksilver and ʒiss. castor oil were given within three hours. The oil was not retained. In the afternoon the patient suddenly felt a desire to empty the rectum, and within a short time had eighteen evacuations. On the 9th the mercury was voided. Recovery.—*Dr. Lowenhardt. For. Med. Review.* 1839.

Case XXXIX.—Dr. Schubert reports a case similar to the above, where the patient, apparently in the last extremity, took ʒviij. quicksilver within an hour. Two hours after he had stools and soon recovered. *London Lancet.* 1848.

Case XL.—A type founder, aged thirty-five, was seized on Sept. 17, with violent pain in the umbilical region—presumed to be painter's colic. Opium and croton oil. 19th, no evacuations. Paroxysms more severe. Abdomen tender; vomiting; a tumor discovered in the right iliac region. V. S. purgatives, enemata, and, at night, large doses of opium. 20th, aggravation of all the symptoms. Injections of air, by means of the common bellows were almost immediately followed by a small evacuation and relief. In five hours the injection was repeated, bringing away two copious stools. 21st, had seven dejections since last visit and quiet sleep for three hours. Pretty severe enteritis followed, which yielded to the usual remedies in a fortnight.—*Dr. Wood. Boston Med. and Surg. Jour.* 1834.

Case XLI.—A child, three months old, struggled and screamed violently while being vaccinated; after this it slept about two hours. On awaking, it did not appear well, and in the evening it was evidently suffering. The abdomen was tumid, and there was a discharge of thin fluid from the bowels, mixed with blood, but no proper motion. Rhubarb and gray powder, with a carminative mixture were given; the next morning the child was much worse; the abdomen was tumid and tender; on being pressed, there was a greater discharge of thin fluid, mixed with blood, still no motion; there was great anxiety of countenance, and vomiting of

bilious matter. A hard lump, about the size of a hen's egg, was now felt in the right iliac fossa; an enema was administered, but returned inoperative. Two grains of calomel, with several aperients, were given during the day without effect; in the evening air was with some difficulty introduced into the bowels by means of an enema syringe, but it did not pass beyond the obstruction; in the course of the evening the child died, thirty-three hours after the commencement of the unfavorable symptoms. The whole quantity of blood voided was about four ounces. Necroscopy. There was obvious fullness and elevation of the panites in the right iliac fossa. The peritoneum, and the intestines generally, were healthy; there was neither deposit of coagulable lymph nor of fluid. The lower portion of the ascending colon, where it is continuous with the caput coli, was turned inwards upon itself, and this inflected portion enclosed the cœcum, which was again in part everted upon itself, or turned "inside out"; the appendix vermiformis and about an inch and a half of the termination of the ileum, were included in the colon. The coats of the cœcum were exceedingly congested; the mucous membrane very soft and swollen; the thickness of the gut much increased, and the cellular tissue between its coats infiltrated with serum.—*Dr. Chowne. London Lancet.* 1842.

Case XLII.—The patient, a boy aged twenty months, had, on the 17th, a sudden attack of pain in the belly, followed by convulsions. The bowels had been opened that morning. There was neither tumor nor tenderness of the abdomen discoverable. An emetic and calomel were prescribed. The child vomited, but had no evacuation. In the evening he had a warm bath and an enema, which were followed by a scanty motion. The calomel was repeated. 18th, no better; vomiting; bowels unmoved; ordered stronger purgatives and injections. An indistinct tumor was now detected in the right iliac fossa; no tenderness or distention. Intussusception diagnosticated. 19th, vomiting and constipation persist; the tumor well defined and hard; no tenderness. Large warm water injections were directed, but the rectum could not be made to receive more than ten or twelve ounces. 20th, fecal vomiting; no tympanitis; sinking rapidly; death at 11 P. M. Post-mortem—The cœcum and ascending colon were filled with inverted bowel in a state of gangrene. There were no adhesions or signs of inflammation in the adjoining parts.—*Mr. Taylor. Ib.* 1843.

Case XLIII.—A woman, aged 55, was suddenly attacked, on the 13th of June, with violent pain in the abdomen, and vomiting, which continued unabated for two days. She had injections and castor oil without effect. Dr. B. saw her on the

19th. She was suffering great pain in the belly, which was distended and intolerably sensitive to pressure, especially in the left iliac fossa. She took calomel and opium, and had turpentine applied to the abdomen. 21st, better; bowels moved slightly. Calomel and opium continued every six hours, and castor oil left for the next morning. July 5th, while at stool, the patient passed nine inches of the intestine. 19th, well.—*Dr. Blackton. Ib.* 1853.

Case XLIV.—The patient, a man aged 48, complained of a somewhat severe pain in the bowels with constipation, during two days. The usual remedies were inoperative. The symptoms became aggravated; the abdomen was distended and especially painful to the right of the navel; stercoral vomiting; pulse frequent and almost imperceptible. A warm bath was directed, after which the patient was placed on his back and his legs raised over the shoulders of a strong man. His body was supported by two persons, and his head allowed to hang downward. The patient was then shaken briskly several times, while the physician kneaded the abdomen with both hands. After twenty-five minutes of this manipulation the patient experienced, all at once, in the chief seat of the pain, the sensation of something having given way, when the pain immediately and wholly ceased. Complete recovery. *Dr. Schrobitz. Ib.* 1843.

Case XLV.—A girl, aged 12, was seized, April 29th, with vomiting and excruciating pain in the right side a little below the ribs. In that situation there was discovered a tumor the size of a goose's egg and very painful on pressure. Ordered calomel, opium, leeches and fomentations, but with only very partial relief. From the 3rd to the 17th of May, the vomiting was feculent. The abdomen was tender, tympanitic and the seat of almost constant pain. A blister was applied over the abdomen, followed by hot flannels. Soap and water, and turpentine, and other enemata were repeatedly administered. 9th, twelve inches of the ileum passed. The patient comparatively easy for two days; no vomiting; a natural stool. 14th, slight feculent vomiting; five motions after an injection. 15th and 16th, no vomiting; several small stools; abdomen still large and tender. and painful. Poultices. 17th, copious feculent vomiting throughout the day, after which the patient commenced improving and by June 14th was well.—*Mr. John Lang. Ib.* 1855.

Case XLVI.—A man entered the hospital with symptoms of invagination, of which he died the following day. At the post-mortem, it was found that forty-one inches of the large intestine, beginning at the superior portion of the rectum, had been strangulated by passing through an old opening, two

inches in diameter, in the mesentery, near its attached border. Through the same aperture were strangulated two loops of small intestine, one nine, and the other seven inches in length.—*Dr. J. T. Metcalfe. New York Medical Times.*

Case XLVII.—A healthy child, four months old, was suddenly seized, Oct. 8th, with obstruction of the bowels and vomiting. 9th, a small quantity of blood and mucus passed, with much straining. There was faintness and much distress. These symptoms continued for three days, when the action of the bowels was restored, and the sickness much subsided, until Oct. 28th. The obstruction, vomiting, etc., now returned and continued for three days, when the bowels again acted, and the vomiting, etc. ceased. The evacuations were attended with severe straining, and on Nov. 24th a portion of the bowel protruded at the anus. This steadily increased until as much as six inches of intestine would be found down, and was with difficulty returned. Sloughing of the part set in. The child nursed freely and no longer vomited, but died Dec. 11th, *nine weeks* from the commencement of the attack. On examination, the intussuscepted portion consisted of small intestine which had been protruded through the colon and rectum, and finally from the anus. The bowel was pervious, but its calibre was much diminished. The peritoneal surfaces of the prolapsed bowel were adherent along their whole extent by firm fibrous bands, and upon the mucous surface a considerable slough was observed.—*Mr. Jones. London Lancet*, 1857.

Case XLVIII.—A female infant, aged six months, was taken in the evening with vomiting and apparently great pain, which continued, but seemed to become easier during the night. At noon on the following day she had pain in the abdomen, vomited occasionally, and passed frequently a small quantity of blood-stained fluid, but no fæces whatever. Symptoms continued with little variation for three days. A very large purgative injection now given was said by the nurse to have been succeeded by ten stools. The skin was pale, countenance distressed, tenesmus considerable. Death occurred next morning, the fifth day of the illness. A few drachms of brownish serum were found in the peritoneum, and the vessels of the small bowel were much conjested. The descending colon was much puckered, and, together with the rectum, was distended to within two inches of the anus, with a portion of the ileum and the whole of the superior part of the large intestine. The volvulus was of dark color, from congestion; and the presenting portion afforded to the finger the same sensation as the adult os uteri.—*Mr. Baller. Ibid*, 1857.

Case XLIX.—A man, aged 64, was seized in the street, Aug. 2nd, with acute pain in the abdomen, and vomiting.

Took castor oil, but rejected it. Had repeated doses of senna and salts, but threw them up. Obstinate constipation. 4th.—Severe pain and tenderness in the left epigastric region; vomiting. Croton oil, warm baths, turpentine enemata, calomel, and scammony were used without avail. 5th.—Symptoms persist; stercoral vomiting and great prostration. Had a large injection of tepid water, followed by copious dejections and immediate relief. Improved slowly and by the 9th was convalescent.—*Dr. Henderson. Ibid*, 1845.

Case L.—A boy, aged six years, had, Oct. 28th, incessant vomiting, with constipation, abdominal pain and tenderness, especially in the right iliac fossa. The usual remedies were given without effect until Nov. 2nd, when the vomiting ceased and severe general convulsions and insensibility supervened—the latter lasting twelve hours. Patient rallied under powerful stimuli. E. V. to the neck, and calomel, one gr. every four hours. 3rd.—Convulsions at intervals. 4th.—Had sleep, and was better. Constipation still complete; pain, tympanitis. An injection was returned, mixed with dark blood. Calomel continued in one-half gr. doses. No material change for four days. 7th.—The cœcum with its appendix, and a part of the ascending colon, were voided by the rectum. 8th.—Had a natural solid motion. 9th.—Some diarrhea, which soon subsided; patient finally recovered.—*Charles King. Ibid*, 1854.

Case LI.—A child, to whom it was necessary to give castor oil in order to bring away the meconium, continued ailing during the first eight or ten weeks. When six weeks old it had an attack similar to the one about to be described, from which, however, it gradually recovered and became quite strong. Ten weeks after, it was seized, without premonitory symptoms, with hemorrhage from the stomach and bowels. The hemorrhage had been abundant and frequent, especially from the bowels, for one week when the patient was seen by Dr. M. On examination, the napkins contained apparently nothing but pure blood. The evacuation from the stomach consisted of a thick greenish-yellow matter, abundantly studded with white particles, and only slightly mixed with blood. This matter was not vomited, but passed from the mouth without effort, and as if from regurgitation, produced by reversed peristaltic action. The child's countenance was pale and exsanguine; the pupils slightly dilated; but there was no anxiety about it indicative of any serious internal mischief. The pulse was weak and frequent, and the abdomen slightly distended and tender. There was occasionally sudden and violent screaming. The child gradually grew worse; the regurgitation increased, and the abdomen became more and more distended and painful. The screaming finally ceased;

the discharge *per anum*, which continued without admixture with fæcal matter, changed in color from a bright red to a dark grumous-brown, with a very fetid, gangrenous odor, and at length became arrested by death. Post-mortem: The stomach, which was healthy, contained a large quantity of thick greenish fluid. The small intestines were remarkably distended to within a short distance of their termination, where they where contracted. They contained a large quantity of fæcal matter. The cœcum and the whole of the colon were invaginated in the sigmoid flexure of the latter, from which it was impossible to withdraw them in consequence of the firm adhesions that had taken place. The appendix vermiformis projected from between the inverted and the containing intestines. The rectum was much contracted. The inverted portion was reduced in length to about three inches, and completely gangrenous, while its canal was completely obliterated by numerous large red masses resembling organized coagulæ.—*Mr. Markwick. Ibid*, 1846.

Case LII.—A female child was found suffering from severe vomiting. Her bowels had not been relieved for two days previously. A large sausage-like body, somewhat tender on pressure, was felt in the left ilem; the child was not particularly heated or feverish; tongue clean and natural. Purgatives, enemata, narcotics, and vesication without benefit. The enemata appeared to reach a certain point and were squirted out again with great violence. The child suffered excruciating agony from spasmodic pains, and died in four days. An invagination of the large intestine was found, with great thickening from organized effusion. The intussusception was believed to have existed from birth, as the child had suffered continually from disordered bowels.—*Dr. Carter. Ibid*, 1849.

Case LIII.—A man, feeble and emaciated, aged 35, for two years had been subject to spells of vomiting; they had been severe and more frequent during the last three months. Was treated for profound gastro-intestinal inflammation. Three days after, a tumor was found in the left ilium. Died this day. Post-mortem: A portion of the ileum, the cœcum, the ascending and transverse colon were found invaginated in the descending colon. There were also firm adhesions and partial gangrene.—*Dr. Dance. Med. Chir. Rev.* 1827.

Case LIV.—A man, aged 22, had colicky pains for several months, with vomiting and constipation. Symptoms disappeared under leeching. Three months later he was again attacked and the disease treated for several days as acute peritonitis. A tumor was now detected at the sigmoid flexure. Had leeches, cataplasms, hot baths, diluents, opiates, etc., but sank after terrible suffering and died in eleven days from the date

of the seizure. Post-mortem: There was universal peritonitis, with numerous adhesions. Two inches of the ileum had passed into the cœcum, the latter had become inverted and pushed forward into the ascending colon, which, in its turn, had passed into the transverse arch, and all these parts, thus invaginated, had gone down to the left iliac fossa. In some portions the bowels was thickened, agglutinated, and gangrenous.—*Ibid*, 1827.

Case LV.—A child, four months old, had a copious evacuation attended with great pain and straining, then a discharge of mucus and blood, afterwards constipation. Purgatives and enemata were ineffectual and death occurred in sixty-eight hours. The lower extremity of the ileum and the cœcum were found in the rectum.—*Monro, 2nd. Ibid*, 1827.

Case LVI.—A boy had for some years, pain and a tumor which was tender, in the region of the transverse and descending colon. His dejections were fluid, serous, bloody. Things grew worse; the boy was expected to die. Sir Astley Cooper saw him and felt in the rectum the invaginated portion of bowel. The patient suddenly got better; the pain diminished; the tumor disappeared, the stools became natural, and complete recovery ensued.*—*Ibid.*

Case LVII.—A man, aged 48, was taken, after some excesses, with diarrhea and colicky pains. A tumor was found in the left ilium. Constipation and vomiting which resisted all treatment supervened. The tumor increased in size, was painful and tender. Vomiting became stercoral; hiccough; a portion of the tumor protruded at the anus. Death in eight days. Peritonitis with effusion and extensive adhesions. Thirteen inches of the colon were found invaginated in the rectum.—*M. Roux. Ibid*, 1827.

Case LVIII.—A child, three months old, was suddenly attacked with vomiting, griping pains, and constipation. Passed pure blood and mucus. Suffered excessive pain. A hard tumor was felt in the left side of the abdomen, and there was a protrusion of bowel from the anus. Death occurred on the fifth day. Post-mortem: The whole of the cœcum, ascending, transverse and descending colon, were found in the sigmoid flexure of the latter, much inflamed.—*Mr. Langstaff. Ibid*, 1827.

Case LIX.—A child, nine months old, was seized with spasm; passed a large, loose stool followed by small, mucus and bloody dejections. A deep-seated fullness or hardness was felt in the left hypochondrium. Purgatives, fomentations, warm baths, enemata, and blisters were all without effect.

* The Editor of the Med. Chir. Rev., who saw this case, doubted whether it really was one of intussusception.

Death in sixty hours. The ileum, cœcum, ascending and descending colon were found in the sigmoid flexure.—*Dr. Ash. Ibid*, 1827.

Case LX.—A man, aged 40, was thrown down and trampled on; had constipation and vomiting which were not relieved by remedies. Diarrhea set in; passed mucus, blood, sanies. Bowels again became constipated. The patient felt something unusual in the rectum. The substance protruded and he drew it away. It proved to be a portion of the ileum, having at one extremity the ileo cœcal valve, and was a span in length. Gradual recovery.—*Wm. Thompson. Edinburg Med. and Surg. Journal.* 1835.

Case LXI.—A man, aged 35, had for four years several hard tumors situated about the umbilicus. They gradually increased in size and became the seat of pain. Malignant diarrhea, with profuse, fetid discharges, supervened, ending in the discharge of a considerable portion of intestine. Partial recovery.—*Ibid.*

Case LXII.—A man, attacked with vomiting, fever, swelling and pain in the abdomen, accompanied by obstinate constipation. Symptoms gradually worse until the tenth day when the vomiting became stercoral. Collapse set in. A few days after he had a profuse evacuation, which was followed by the discharge of a portion of the colon two feet in length. Ultimate recovery.

Case LXIII.—A healthy man, aged 23, was suddenly seized with violent abdominal pain and vomiting. On the fifth day the pain was extreme. The abdomen was tense, tender and hot. Obstinate constipation; fæcal vomiting. A copious evacuation occurred on the eleventh day and the symptoms subsided. 18th, twelve inches of small intestine passed. Recovery.—*Ibid.*

Case LXIV.—A girl, aged 11, had pain, abdominal oppression, fever. On 6th day, hiccough, fæcal vomiting and every symptom of approaching dissolution. In the evening a portion of the colon and cœcum measuring $13\frac{3}{4}$ inches, with six quarts of black and fetid feculent matter passed by stool, this being the first proper stool since the attack. Perfect recovery.

Case LXV.—A man, aged 45, was seized, while lifting a heavy weight, with severe abdominal pain and a sense of constriction, especially in the left hypochondrium. Had a motion then, but no more for four days, when he discharged a gallon of matter with great relief. He improved for ten days, when all the former symptoms recurred in an aggravated form. Soon after he passed a portion of the ileum a foot and a half in length. Gradual but complete recovery.—*Ibid.*

Case LXVI.—A man, aged 37, had a slight colic which was

easily subdued. Recurred on the sixth day but again yielded. On the 8th, took an emetic which produced violent retching—which continued during the day. 9th, Vomiting became fæcal. Belly tympanitic, painful, tender. No stools. 14th, Copious spontaneous stools with great relief. 20th, passed a portion of small intestine eighteen inches long. Recovery.

Case LXVII.—A man, aged 24, was taken with severe vomiting and griping. Had an injection and was relieved. Three days after had a more severe attack. A tumor was observed at the umbilicus. An injection was followed by a large stool, but symptoms were not much changed for ten days, when the vomiting abated, and in other ten days entirely ceased. The tumor continued painful. On the forty-first day the whole cœcum with its appendix was discharged in gangrenous fragments. Complete recovery.—*Ibid.*

Case LXVIII.—A woman, aged 40, suffered for years with stomachic ailments and great torpor of the bowels. On 16th, when seen by a physician, she had had vomiting, abdominal pain, retching and constipation for several days. Tenderness on pressure in the right ilium. V. S. *ad* ℥xxv, purgatives, enemata, warm baths, fomentations, blisters, etc., persevered in for eight days before a stool was obtained. Three days after—the bowels being free in the meantime—a portion of the ileum was passed. Recovery.—*Ibid.*

Case LXIX.—A young man with all the symptoms of intussusception, during eleven days, passed nearly thirty inches of intestine, and recovered.

Case LXX.—A woman, aged 56, who was subject to attacks of spasmodic abdominal pain, attended with flatulence and vomiting, was suddenly seized with severe pain, tension of the belly, griping, and stercoral vomiting. Obstinate constipation; a speedily fatal result looked for. On the seventh day she passed by stool forty inches of small intestine. Recovery. *Ibid.*

Case LXXI.—A boy, aged four years and a half, affected with small pox, discharged by stool the whole of the cœcum with its vermiform process, and likewise a part of the ileum, six inches, and a part of the colon, four inches in length. He recovered.

Case LXXII.—A boy, aged six years, complained of pain in the bowels, attended with considerable fever, which increased for two or three days, until nausea, stercoral vomiting and obstinate constipation announced intussusception. The pain was acute, heat intense, pulse frequent, tongue reddened and covered with a dark fur. In four days an evacuation was procured of a dark, briny appearance, somewhat of an indigo tinge, which was followed by an entire alleviation of all the

alarming symptoms. This discharge was succeeded by one or two others, rather copious, of a like appearance. The evacuations soon became natural, and the patient was convalescent. In less than two days, however, his symptoms were materially worse, and a portion of the intestines protruded in two folds of several inches in length. Most of the intestine thrust out was in a state of incipient mortification. Twenty-four hours after the protruded portion of the bowels sloughed off; it measured two feet in length, After this, passages were procured, though with considerable pain and difficulty. The evacuations resembled the fermenting wash in a distillery. Digestion was very imperfect, excessive emaciation ensued, and death was threatened during several weeks. Health was gradually restored, though the lad remained more than ordinarily subject to attacks of colic and other bowel complaints. *Ibid*

Case LXXIII.—A lad, aged 17, was seized with dysentery. The evening of the fourth day had pyrexia, pulse 110, belly hard, flat, inelastic; the region of the cœcum tumid, hard, and painful on pressure; frequent scanty evacuations of a bloody water, passed with great pain. The evacuations assumed the appearance of a black watery fluid with the odor of putrid blood. On the eighth day, the tension and fullness at the cœcum, and over the right side of the lower belly, were greatly increased; the stools became scanty, in fact nearly suppressed; the patient was apparently sinking. On the tenth day, a tube of small intestine, five inches long, and some fragments of equal length, were passed *per anum*, with some pus and bloody ichor. Two days after, the patient was much better, had three fluid light brown stools, the belly was soft and flat, and only slight fullness in the cœcum remained. He had passed some more small portions of intestine. The hardness of the cœcum gradually subsided. Gradually recovered.—*Ibid.*

Case LXXIV.—A man, aged 26, labored for a fortnight under continual fever, obstinate constipation, severe colicky pains, thirst, etc. The symptoms becoming daily more severe, a violent purgative was administered, which produced two copious and painful stools, with large and continuous vomitings. A few hours before death he discharged a portion of the small intestine; momentary relief followed; soon after he had a fainting fit, then convulsed, and died. The portion of intestine, which was supposed to be the lower end of the jejunum, was a span in length, and had a portion of the mesentery attached to it.—*Ibid.*

Case LXXV.—A lad, of 15 years, suffered for two weeks with intense pains in the abdomen, particularly round the umbilicus, and had vomited not only whatever he swallowed,

but also stercoraceus matter. The abdomen was very tense and painful, particularly round the umbilicus; the fever was acute, and the patient inexpressibly restless. The following night the vomiting ceased, the bowels opened, the patient passed a quantity of very brown matter, of a fetid smell, the belly speedily collapsed, and the severe symptoms ceased. In the second evacuation he passed a portion of small intestine twenty inches in length, gangrenous at its two extremeties. The next day he passed a portion six inches long. After this he was unable to walk, unless in a semi-bent position, and suffered severe pain after meals, sometimes vomiting what he had eaten. He neglected the rules of diet prescribed for him, and died of indigestion two months after his accident.—*Ibid.*

Case LXXVI.—A woman, aged 30, was seized suddenly, after exposure to cold, with violent pains in the region of the sacrum, which shifted to that of the stomach. The pain fixed itself on the third day in the region of the navel. The patient had occasional vomiting and constipation which resisted all remedies. On the fifth day the abdomen was enormously swelled, the pulse small and contracted. In the evening there was smart purging, but was not followed by any relief of the pain or diminution of the great swelling of the abdomen. Vomiting and hiccough occurred occasionally; on the 8th day the patient was much exhausted. This night three stools were passed, with great relief. During the 9th day several copious discharges. The 10th day the abdomen had completely subsided, and the pain had ceased. On the 12th day, along with an evacuation, there was discharged a portion of intestine three fourths of an ell in length, consisting partly of jejunum, partly of ileum, colored black on its inner surface, but otherwise uninjured throughout its whole length. In a few days the patient was convalescent, rose and walked about her room. Symptoms of dropsy, however, soon supervened, increased by degrees, and terminated fatally in nine weeks. *Ibid.*

Case LXXVII.—A woman, aged 50, very subject to costiveness, had twice in her life been attacked with vomiting, violent pain in her stomach and bowels, and obstinate constipation. An attack of the disease, which began with violent pain of the stomach and bowels more especially on the left side, accompanied with vomiting and obstinate constipation, proved fatal. Strong purgatives were followed by evacuations, which at first had a fetid offensive smell, but after a time consisted mainly of blood, and were very numerous for many days. The disposition to vomit was incessant until a short time before death. Three weeks before this event she voided a portion of the colon above a yard in length.

Case LXXVIII.—A woman, aged 30, in the sixth or seventh month of pregnancy, was attacked with very violent colic, accompanied with fever and stercoral vomiting. Not seen until the eighth day, when she was found in a desperate state; that evening she passed the cæcum and a portion of the colon, black and partially gangrenous. She gave birth on the twelfth day to a still-born, prutrescent child, and died on the 14th. *Ibid.*

Case LXXIX.—A woman, aged 67, healthy but suffering for want of food, had violent colic. Nothing relieved the vomiting, pain, and constipation. On the sixth day hiccough and signs of approaching dissolution. Some stools were now procured. Several days afterwards, when medicines had been abandoned, a looseness came on naturally, which continued four days, and relieved her of all threatening symptoms, except extreme debility. On the seventeenth day she voided by stool a piece of the ileum, eighteen inches in length, along with its corresponding portion of mesentery. She became now almost free from pain, but continued very weak, and on the thirty-sixth day died. Post-mortem: Many different parts of the intestines had a livid and almost gangrenous appearance, yet admitted of being blown up with air. Five inches of the ileum, near its lower extremity, adhered so closely together as not to admit of separation. The divided ends of the ileum had united, leaving a stricture which barely allowed the introduction of the little finger.—*Ibid.*

Case LXXX.—A woman, aged 48, subject from infancy to obstinate constipation, was seized after constipation of five days duration, with violent pains in the abdomen and frequent vomiting. For thirty days no relief could be obtained. Pain and swelling of the abdomen extreme, but most marked in the right iliac fossa; she vomited feculent matter. At this time a quantity of clayey excrement and mucus was discharged, and along with it ten inches of the ileum with a portion of mesentery attached. The patient survived twenty-nine days. Post-mortem: The colon was destroyed by gangrene for five inches in length throughout half its circumference. The borders of the gap thus produced had adhered to the inner surface of the parietes of the abdomen, behind the inguinal region, so that these parietes replaced the deficient half of the cylender of the intestine. Thus a kind of pouch was formed in the inguinal region, which opened into the cavity of the colon. The extremity of the mutilated ileum likewise opened into this pouch. The aperture of the ileo-colic valve was closed by adhesions. The excrements it would seem, passed in the first place from the extremity of the ileum into the pouch, and out of it, straightway into the transverse colon.—*Ibid.*

(Concluded in next No.)

MONTHLY MEDICAL SUMMARY.

By E. D. Foree, M.D., O'Bannon's, Jefferson county, Ky.

A Sure Remedy for Arresting Uterine Hemorrhages in Pregnants or Parturients. By Barth. Weber, M.D., *Cincinnati, Ohio.*

We find in the Cleveland Medical Gazette the mode advocated by Dr. Weber for the arrest of uterine hemorrhage, which he has found so efficient, that he has "never lost a woman in child-bed in consequence of hemorrhage from the womb."

It finds its application—

a. In abortions, where the membranes or placenta partially get separated from the walls of the womb, and, in consequence of the opening of the blood vessels, a profuse hemorrhage takes place, the contraction of the artery being prevented by the fetus.

b. In placenta prævia, when in the last stage of gestation, hemorrhages occur in consequence of the gradual separation of the placenta.

c. The fifth period of parturition, with the partial separation of the placenta.

d. In atony of the uterus, immediately after parturition, these contractions either fail entirely, or are not sufficient, in consequence of which hemorrhage ensues.

These are cases of the most dangerous character, and the remedies recommended for them are mostly insufficient and unsatisfactory.

It is for this reason that we still hear of fatal cases occurring under the circumstances as above mentioned, although the method to be here suggested, and by me frequently proved as effective, will in every instance keep off death, and will insure to the obstetrician the same safety that the ligature does to the surgeon. I mean *the compression of the arteria aorta descendens.** A pressure applied to this artery, in the region of the fourth lumbar vertebra, will prevent the access of blood to those vessels, and in consequence arrest the uterine hemor-

*The arteries which supply the uterus with blood are branches of the arteriæ hypogastricæ, which originate from the iliacs, which form the lowest branch of the aorta descendens.

rhage. Although the vessels of the artery connect with some branches of the arteriæ spermaticæ, which take their origin from the renal artery, or the aorta itself, consequently above the place of compression, yet these ramifications are so small, and enter so little into the parenchyma of the uterus that they can come only very little into consideration, at the same time they terminate in the fundus uteri where the contractions first commence, and, consequently, the closing up of the blood vessels takes place first.

The unimportant small branches, which the uterus receives from the external spermatice, take their origin from the cruralis and have their termination below the place of compression.

After urging objections to the tampon, and to the tight bandage immediately after birth, Dr. Weber gives the following as his plan: "In order to perform this small operation, the patient is to be placed on the back, the pelvis somewhat raised, and the thighs drawn up towards the abdomen, to relax the abdominal walls; then you search with stretched hand for the fundus uteri, which generally you will find near the navel; push forward with the fore and middle fingers, immediately above the fundus uteri, in a perpendicular direction, and at the same time try to push the intestines upwards, which is easily accomplished. In this manner you reach the spinal column, and feel plainly the pulsation of the abdominal artery. Now you press with the fore and middle fingers perpendicularly upon the artery, the hand forming almost a right angle with the spinal column. It is best, if possible, to use the right hand, because the aorta, running somewhat to the left of the spinal column, occupies the angle formed by the fore and middle finger, which greatly facilitates the compression. In this way you have it in your power to suppress the circulation in the aorta either more or less as the pressure is steadily or temporarily made.

Variola, Vaccinia, Etc.—It is really refreshing to observe the energy, application, and endurance in every thing which pertains to our profession and its promotion in our Northern brethren. No opportunity for investigation is permitted to

pass unimproved. Recently they have had an epidemic of small pox in Boston, and the neighboring country, during, and succeeding which, every prominent point connected with its origin, spread, and prevention, as well as its nature, and accidents, have been carefully studied, talked, and written about. Almost every monthly visit of the Boston Medical and Surgical Journal during the last two or three months, has brought us something in connection with it of intrinsic interest. Prominent amongst them is an article by the veteran Dr. Walter Channing, in which he thus speaks of the popular and widely current objections to vaccination: "One of them, and the most important, is this: the possibility, and to many the certainty, or strong probability that various diseases, humors, etc. may be introduced into the body by vaccination. In a recent visit to Dr. Jackson, I asked if he had met with any instances and how many, of diseases of any kind being introduced by vaccination. He said he had never met with an instance. Here is the testimony of a careful and accomplished inquirer to a most important fact in the history of vaccination. Here is the testimony of 60 years to its entire safety. This testimony may well rest alone; but if it can be added to, may I not appeal to my own observation for more than half a century, concerning the same important inquiry?

"Not an instance has been observed by me of the introduction of any disease by vaccination. It is a beautiful fact, that vaccination exerts its wonderful power with scarce any evidence that any morbid process is at work in the system."

He then goes on to give his unqualified opinion (founded upon his extended observations) of the perfect efficacy of vaccination in prevention of variola, and gives several cases exemplifying it in a striking manner. Notwithstanding these facts, and the additional fact that "in order to render vaccination as accessible as possible to all classes of people, the profession and the municipal government have done all in their power, and the fee for the operation and subsequent attendance being only five dollars," it is strangely true that great dilatoriness in reference to it pervades the people.

Effects of Mustard upon the Eruption of Variola.—Messrs. Editors: In your Journal of the 8th inst. you have a note from H. Lenardson, M.D., stating the non-appearance of the eruption in confluent small pox in parts to which mustard was applied. Dr. L. very wisely seeks to know whether this observation accords with that of others. Within the last month I saw one case in which there was a marked contrast to that reported by Dr. L. A lady past 70 years of age, was affected with varioloid after several days of much discomfort. During those days she used a mustard cataplasm very freely over the upper half of the abdomen, and this part was left much discolored. When the eruption took place, the part thus discolored had on it many more pocks than any other part of equal extent on the head, trunk, or extremities. This case was seen, and the particulars noted by Dr. H. J. Bigelow, as well as by myself.

JAMES JACKSON.

Hamilton Place. April 7th, 1860.

Dr. Hunt, in the Medical and Surgical Reporter of April 28th, mentions collodion as a most effectual remedy for venereal warts, condylomata, and some other kindred affections. He has resorted to it with uniform success for six or eight years. In venereal warts "the conditions for its application are, that the part should be wiped perfectly dry; the whole surface and the parts about the base should then be well covered. From time to time, the patient should be directed to examine the part, and if there is a crack, fill it with the collodion." He has known large growths to disappear within two or three weeks, under this management, which had resisted nitrate of silver, mineral acids, and the scissors. He says he has cured obstinate cases of gleet by directing a narrow slip of lint to be worn within the urethra. Thus by analogy proving that collodion cures the warts most probably by the maintenance of dryness, possibly aided a little by the compression exercised by the contraction of the collodion during the drying process.

Dr. T. L. Ozier, of Charleston, in a communication on Ele-

phantiasis, read before the South Carolina Medical Association, reports a case of this disease successfully treated by the ligation of the femoral artery, which I believe is the fifth or sixth instance in which this troublesome affection has been cured by this method. This case was well formed; the size of the leg and foot so considerable as to incapacitate him from labor, and render him a burden to himself; so much so, that he begged for amputation if no other relief could be adopted.

On the 23rd of October the vessel was tied at the lowest point of Scarpa's triangle. No troublesome accident followed. On the second day the leg and foot began to decrease in size. Three months subsequently the natural size, with free and full use were restored. This operation, introduced by Dr. Carnochan, of New York, promises to do much towards the relief of this hitherto almost incurable disease.—*Charleston Med. Jour.*

American and French Methods of Dressing Wounds.—Professor Stone, of New Orleans, thinks both the American and French surgeons are a little guilty of routineism; at any rate rather exclusive in their plans of dressing recent wounds. The American surgeons, he charges, dress with the view of obtaining union by the first intention in all cases, whether it is probable it may be effected or not; whilst their French brethren fill their wounds with lint to prevent union, if there should be a disposition to it. The different plans, he admits, are to some extent justified by the atmospheric or climatic states of the respective countries. In France there being less disposition to immediate union, and greater proneness to purulent absorption, or development of pyemia, the introduction of charpi for absorbing the effused fluids is more warrantable, but should not be exclusively used. In our country there are many conditions: as the state of the patient, the nature of the wound, the epidemic tendencies, etc., etc., which should forbid attempts at union by the first intention. For it would not only be attempting an impracticable result, but placing the wound in a position to endanger the development of unhealthy inflammation, and prevent it from granulating "as well as if it had been left more open for the discharge of any effused fluid, and for the application of stimulants if

necessary." He adds, "It is a great object, in many cases, to effect union by the first intention, in large wounds, as after amputations; for the diminished irritation and the saving of the drain of suppuration may often be the means of saving the life of the patient. Something may be done before dressing to lessen the effusion that always takes place from exposed surfaces, and to favor healthy reaction. The effusion of serum would cease, of course, if we waited long enough before dressing, but this is not generally done, and indeed, in many cases it would require many hours exposure. The application of ice answers the double purpose of drying the stump, affording healthy reaction, and the adhesive process." Besides ice, he advises the application of the alum or perchloride of iron. He has been surprised at the readiness with which wounds heal after the application of the 'potent styptics.'"—*N. O. Med. and Sur. Jour.*

Bleeding Piles.—One of the surest and simplest means for temporarily checking this kind of hemorrhage is the application of perchloride of iron, dissolved in glycerine, and applied on a piece of linen.—*Med. Times and Gazette, from Nash. Jour. of Med. and Surg.*

Sickness of Pregnancy.—Dr. C. E. Bagot calls attention (Dublin Med. Press) to the employment of calomel pushed to slight salivation, as a most successful mode of relieving this sometimes intractable and dangerous affection—a practice which he recommended in 1846. Although there were no symptoms of inflammation, having seen the effects of calomel in obstinate vomiting, Dr. B. determined to try it after having exhausted all the known remedies, with no beneficial result. As soon as a slight ptyalism was produced, the patient retained food, the vomiting ceased, and gestation proceeded to full term without accident. The symptoms in this case were of the worst form; emaciation extreme; pulse a thread; no tenderness at the epigastrium; neither had she pain in the region of the womb, or uneasiness on pressure over that organ; she had no febrile or inflammatory symptoms, and yet the most complete relief followed the exhibition of the mercurial pushed to slight salivation. The patient was relieved in subsequent

pregnancies, in which she was similarly attacked, by the same medicine.—*Amer. Jour. Med. Sciences.*

Normal Hypertrophy of the Heart during Pregnancy.—M. Larcher having examined 130 pregnant women at the Materenite, Paris, the greater number of whom succumbed to puerperal fever—no lesion having preceded or given rise to the condition of the heart observed in them, the conclusion he comes to is, that the *heart is normally in a state of hypertrophy during gestation.* The walls of the left ventricle become increased, by at least, from a fourth to a third in thickness, its texture being also more firm, and color more bright—the right ventricle and the auricles retaining their normal thickness. These observations by M. Larcher date back some thirty years, and have been confirmed by subsequent ones, made with great exactitude, by M. Ducrest, upon 100 other women.

Then follow some speculations as to this state of things predisposing the following affections, viz: congestions and hemorrhages; the bronchitis, so common in pregnancy; the greater danger of pneumonia when developed in pregnant women, and the frequency with which abortion then occurs. The various forms of hemorrhage met with in pregnancy, as epistaxis, hæmoptysis, menorrhagia, and apoplexy, and the acceleration of pulmonary consumption after delivery, which had been retarded during the term of gestation.

These affections are supposed to be influenced by the non-disappearance of the hypertrophy after parturition, especially when the recurrence of pregnancy has been frequent and at short intervals.—*Ibid. From Med. Times and Gazette, from Archives Generales.*

Hypodermic Treatment.—There being at the present moment much stress laid upon the efficacy of local injections in the treatment of various painful and troublesome ailments, we abstract the following succinct directions on the mode of their employment from an article on this subject by Charles Hunter, late House Surgeon to St. George's Hospital:

"The syringe for injection should be small, having a glass barrel, with silver fittings to contain a piston worked by a

screw rod, each half turn of which shall expel a half minim, or a small drop. It should be supplied with a small pipe to screw on and off the barrel at pleasure, have a hard gold point which should be sharp and perforated on one side by an oblique opening through which the narcotic or other solution can be expelled in drops."

The operation is simple, no blood is shed, and is as painless as the prick of a needle.

The Employment of the Syringe.—Having charged the syringe with the narcotic fluid, hold it in the right hand at the junction of the barrel with the pipe, and with the left hand take up, between the finger and the thumb, a fold of the skin of the patient, so as to make tense the part beyond your thumb, then the right hand being gently steadied, but not pressed on the patient, let the point of the syringe, which is held at a right angle to the skin, touch the part which is tense, and with a quick but steady movement, be passed through it; the point being well through the skin, the direction of the pipe may be altered so that it may run along in the loose cellular tissue beneath;* all this is the work of a moment; the prearranged number of drops are then introduced by so many turns of the piston, the pipe is then withdrawn, a finger making slight pressure as near as possible on the punctured spot, the object being both to steady the skin, and prevent any drop of liquid escaping; and lastly, a narrow strip of plaster, cut beforehand and warmed, is placed on the spot.

The strip of plaster is generally a precautionary measure, but it becomes a necessity when the quantity injected is large, say twenty minims; but it is always useful to prevent the spot from being chafed. A broad piece of plaster is worse than none at all; it presses on the "little lump," which is caused for a few minutes by the presence of the injected fluid beneath the skin, and not at all, perhaps, on the punctured spot, and so it does more to press the fluid out than to keep it in (I have seen a first injection in a case of delirium tremens fail for this very reason); but a narrow strip just covers the punctured spot.

These directions may appear unnecessary, but the operation may fail, as just shown, for want of attention to these little points. If the introduction of the syringe be attempted, the skin of the patient being loose, or the syringe held at the

*In the majority of cases, the plan above described is best, especially with thin people; if, however, the patient is very fat, it is better to perforate vertically a portion of skin and subjacent fat, pinched up, and so made tense between the finger and thumb.

further end, and consequently unsteadily, the patient may by these means be put to a great deal of pain, and the pipe of the syringe may be bent or broken from the socket; but when it is introduced with a quick, steady movement, the skin being tense, the patient does frequently not even know when the point is introduced.

The Tissue to Inject.—The tissue injected is the cellular or areolar tissue of the body; it may not matter much whether the cellulo-adipose, the panniculus adiposus, or the reticular tissue beneath it (not containing fat) be injected, but the latter is to be preferred; it is the looser of the two, fluid injected into it meets with no obstruction, and cannot easily escape from it, but if injected into the skin itself, as some think it is, or the conjoined cellulo-adipose tissue, it is apt to cause pain, it enters less readily, and is more apt to escape; nor does it seem to act quite so rapidly as when injected into the loose cellular tissue from which most probably absorption is the more rapid.

The Part of the Body to Inject.—When the object is to quiet the brain, or to produce a general effect, is it material whether the fluid be injected into the cellular tissue of the body or of an extremity? No; the non-necessity of localization is the basis of the plan of treatment, and is the reason of its applicability in cerebro-spinal affections and general diseases. I need only refer to the various cases detailed in corroboration of this. The site which I, however, most commonly inject, is the inner part of the arm. The skin is here thin, easily made tense, and easily perforated; the cellular tissue beneath is loose and readily reeeives the fluid; there are perhaps more veins here than in some other parts, but they are easily avoided.

The Quantity of Fluid to Inject.—It is well to have the fluid of that strength that three or four turns of the piston shall be an ordinary injecting dose. Two or three turns can be made in a moment of time, and it is no small relief or surprise to the patient, who has been expecting, perhaps dreading, an operation, to find all over in less than half a minute.

The Dose.—Too much caution cannot be employed with regard to the amount of the narcotic injected. Two half turns, if your solution is strong, may double the dose, and the life of the patient, for the want of due care, be placed in jeopardy; I would, therefore, urge attention to these points:

1. Be certain of the exact strength of the fluid employed, and the exact value of each turn of the piston.

2. Concerning first injections, never use more than half the ordinary stomachic dose for males, nor more than a third for females.

3. Should a second injection be necessary, let it not be used too soon; nor in a full dose when the patient is partially under the influence of the narcotic.

These points are of practical importance; a certain degree of narcotism has to be reached for benefit to accrue, and by the injection it can be reached in many cases by a very small quantity of the narcotic, because of the rapidity with which the effect is produced, what we have to avoid is too great an effect; what we try to produce is a certain effect with as small a quantity as possible. This leads me to remark that men bear narcotics much better than women.

I was not aware to what extent this was the case until I had employed this treatment some little while; but I now think it may be looked on as a rule that men in general will bear with no ill effects, but be benefitted by, injected doses of narcotics, which doses would very strongly, if not seriously, affect women; in fact, this treatment is a test of the exact amount of a narcotic necessary to produce a desired effect, when taken by direct means into the general circulation. For instance, you introduce beneath the skin one-eighth of a grain of morphia, the effect which follows is the whole effect of the whole one-eighth; but you can not be certain that the effect which follows the administration of one-eighth of a grain, firstly, by the skin; secondly, by the stomach; or, thirdly, by the rectum, is the effect of the whole one-eighth; but it is the whole effect of the quantity absorbed.

As by this method we get the whole effect of the known quantity introduced, which we are not sure of getting by the other modes, we have now a method as acurate as that of venous injection (without its dangers) for testing the precise effect of little-known medicines on animals, and the exact doses and effects of well-known medicines on man, of seeing the difference which the sex requires in the dose, and of ascertaining the minimum amount required to produce a desired effect.

It is impossible to say "what amount is to be injected," without knowing the particulars of the case, as well as the sex and age; but taking the acetate of morphia for an example, I think that first injections for adult females should vary from one-eighth to a quarter or one-third of a grain; for adult mails, from one-sixth to half or three-quarters of a grain.

First injections should be small rather than large, and are good indicators of the amount necessary, should repetition be required. It is true that I have seen used, and employed myself, much larger quantities than those I have mentioned, for first injections; but the cases have been exceptional, and under close observation.

In the preceding papers on this subject, I have shown the advantages of this mode of treatment over the endermic, epidermic, and stomachic methods, which requiring longer to act are less certain, and apt to fail completely. Before, however, bringing this paper to a close, I would allude to two other modes of medical administration, viz., by the tongue and by the rectum.

1. *Medicines Administered by the Tongue.*—Dr. Wardrop has shown* that there is a remarkable difference in point of time when medicines are absorbed from the stomach or from the mouth, absorption being most rapid from the latter, and the effect is more regular and and more equable. Nor is it difficult to see why—the medicine absorbed from the mouth is taken directly into the general circulation, but when absorbed from the stomach, it has *en route* to pass through the portal system; absorbed from the tongue, the effect is more regular, because the medicine is more certainly absorbed *en masse.*

There is, then, much similarity between the hypodermic and the lingual modes. Rapidity of absorption is the great point in the *modus operandi* of each; and with regard to the effect, they both have the advantages of rapidity, greater efficacy, regularity, and equability. Can the one method, then, replace the other? Are they applicable for the same cases and medicines? No; they both have their advantages. Dr. Wardrop's plan is best for the administration of tasteless medicines, for calomel, *et hoc genus omne*, but it can not be used for those medicines which are nauseating and bitter—not, in fact, for narcotics generally, nor for cases of delirium, patients refusing medicine, etc., which are the cases where the other plan is most desirable.

2. *Medicines Administered by the Rectum.*—This mode of medicinal administration is of great value, and useful as a means both for local and general treatment; there can be no doubt that this method has advantages which the stomachic has not, viz., of greater rapidity of action and greater effect, but the effect is uncertain; this uncertainty of action is not dependent on the mode of introduction, especially if the medicine be used in the liquid form, and employment be made of the graduated syringe, invented by Mr. Spencer Wells, to regulate the exact amount introduced; but is due to the want of regularity of complete absorption, which can not be done away with. The rectal method is the more advantageous where the object is to administer the smaller doses of narcotics for affections of the intestinal canal, the rectum, and the parts adjacent supplied by the great sympathetic, but most especially for the speedy introduction of stimuli, and of nutriment

*Ranking's Half-yearly Abstract, vol. xxii: p. 302.

in urgent cases; for liquids introduced by this plan have the advantage of being conveyed simultaneously into both the portal and systemic circulation; the hypodermic, on the other hand, is the more applicable for those cases where the part requiring the narcotic, is supplied by the systematic circulation, and is under the influence of the cerebro-spinal nervous system.

Buttermilk and Longevity.—It has often been stated that the majority of centennarians here, attributed their long life to the free use of buttermilk; and the Philadelphia papers, in noticing the arrival from Ireland, in that city, of Mrs. McKenna, an old lady, who has nearly completed her century, very gravely added, that "her existence has been prolonged by buttermilk." To this, the venerable old lady replied, in a spirited card, in which she says:

"Some of the papers, in speaking of my life, refer to the old saying, of using buttermilk; in answer to which, I have merely to say that I have never used any kind of milk, except in tea, coffee, etc. I am now nearly one hundred years of age, and, for the last half century, have resided in Calledown, a beautiful village, in the county of Tyrone, in the north of Ireland. Temperate habits, and my usual walk, of about two miles to church, I think, had a great tendency towards lengthening my existence in this world."—*Home Press, St. Louis.*

Another "Black Doctor."—The following is a part of the public advertisement of a negro doctor:

T. Edwards is naturally a doctor—having a gift from the Lord. My mother was her mother's seventh daughter, and I am her seventh son; my father was a seventh son, and I am his seventh son; I was born with seven cauls, and I am a seven months' child, and walked in seven months after I was born, and have shed my teeth seven times.

Very thin perforated elastic tubes are extensively used in England and France instead of tents of lint, sponge, etc. They keep the orifice in an abscess open, and effect its complete drainage. They are readily introduced, and produce no irritation.

Pharmaceutical Department.

By THOS. E. JENKINS, Pharmaceutist.

An Introduction to Practical Pharmacy. Designed as a Text Book for the Student, and as a Guide for the Physician and Pharmaceutist. By Edward Parrish, *Graduate in Pharmacy, Etc.* Second Edition. Philadelphia. Blanchard & Lea. 1859. 720 pp.

The second edition of this deservedly popular work has been before us for some time, and should have been noticed long ago but for the press of other business which claimed our earlier attention.

It is a source of gratification to witness the augmented size, with the additional useful matter embodied in this enlarged edition of an original, and, we feel proud to say, an American work, on the much neglected and slighted art of Pharmacy.

This volume is well grown for its age, and affords a striking indication of the rapid advancement of pharmaceutic knowledge within the last few years.

The first edition of this book was published in 1855, and was designed as a text-book for the student, and a guide to the physician and pharmaceutist; and as a second edition has so soon been called for, the fact may be taken as good evidence of the general acceptability of the work to the doctor and the apothecary.

This production is the result of many years of close study and tedious labor of the author as a practical apothecary and as a successful teacher of the art and science of pharmacy to medical students, and the practitioner of both branches of the "healing art" will find that his exertions have not been in vain; for he has given us a book overflowing with information, valuable to all, and so arranged it as to make its merits quickly seen and appreciated.

This book will be found inestimable to all students of medicine and pharmacy, to all druggists, chemists and apothecaries, and especially valuable to physicians who dispense their own medicines. This work is divided into five parts:

The first part gives an account of the furniture and implements necessary in dispensing medicines; of weights, measures, and specific gravity; and devotes a chapter to the explanation of our National Pharmacopœia.

The second part treats of galenical pharmacy, or the science of preparing medicated waters, infusions, tinctures, wines, vinegars, syrups, decoctions, extracts, spirits, pulps, conserves, confections, pastes, electuaries, lozenges, etc.

The third part has been greatly extended, and describes lignin and its derivatives, collodion, acetic acid, creosote, etc.; starch, gums and sugars; alcohol and ethers; resins, organic acids, alkalies and neutral principles.

The fourth part gives a short account of each of all the inorganic or mineral pharmaceutic preparations, comprehending salts of the alkalies, earths, and many of the heavier metals.

The fifth and last part instructs us in extemporaneous pharmacy, or the science of making and compounding prescriptions, commencing with some remarks on the language used in writing prescriptions, and explains their grammatical construction; in which matter many of us will be profited by the instruction given.

The art of selecting and combining medicines is treated of in an able manner. Powders, pills, solutions, mixtures, lotions, collyria, injections, gargles, baths, inhalations, fumigations, cerates and ointments, plasters, cataplasms and liniments, all come in for a share of the author's practical skill in imparting instruction.

The book is finished up with an appendix with rules on the management of the sick chamber, and gives processes for preparing articles of diet useful for the sick and convalescent.

The numerous and copious syllabi interspersed through the work are especially useful and convenient in affording a quick and ready comparison of the proportions of the constituents in a series of preparations; this feature recommends itself to practitioners of medicine in selecting any particular compound, and in regulating the doses in his prescriptions.

The illustrations and typography reflect great credit on the publishers.

NATIONAL MEDICAL CONVENTION FOR REVISING THE PHARMACOPŒIA OF THE UNITED STATES.

The Fifth Decennial Convention for the above purpose, met in Washington City Wednesday, May 2nd, at Willard's Hall, at 10 o'clock A. M.

Dr. George B. Wood, President of the Convention of 1850, was called to the chair, and Dr. John C. Riley, of Washington, appointed Secretary pro tem.

Dr. Thomas Miller, of Washington, moved that a committee of five be appointed to nominate permanent officers of the Convention. This was carried, and Dr. Aiken, of Baltimore; Dr. E. R. Squibb, of New York; Dr. Bridges, of Philadelphia; Dr. Fuller of Maine, and Dr. Thomas Miller, of Washington, were so appointed.

This committee, having retired for consultation, returned the following names:

For President, Dr. Geo. B. Wood, of Philadelphia.

For Vice-Presidents: Dr. Jacob Bigelow, of Boston; Dr. Edward Warren, of North Carolina.

For Secretary, Dr. Thomas Miller, of Washington.

For Assistant Secretary, Dr. John C, Riley. of Washington; all of whom were accordingly elected by ths Convention.

On motion, a Committee on Credentials was appointed, consisting of William Proctor, jr., of Philadelphia; Dr. Thomas Miller, of Washington, and Dr. Cutter of Massachusetts.

This committee reported the following delegates as present at the Convention, viz:

From the College of Physicians and Surgeons of Philadelphia—Dr. Geo. B. Wood and Dr. Robert Bridges.

From the New York State Medical Society—Dr. Caleb Green, and Dr. E. R. Squibb.

From the New York Academy of Medicine—Dr. E. R. Squibb.

From the College of Pharmacy of the city of New York—John Meakim, and William Hegeman.

From the Philadelphia College of Pharmacy—Wm. Proctor, jr., A. B. Taylor, and Edward Parrish.

From the Maine Medical Association—Dr. A. J. Fuller, and Dr. H. T. Cummings.

From the Connecticut State Medical Society—Dr. Gurdon W. Russell.

From the Massachusetts Medical Society—Dr. Jacob Bigelow, and Dr. Ephraim Cutter.

From the Jefferson Medical College—Dr. Franklin Bache.

From the University of Pennsylvania—Dr. Joseph Carson.

From the Medical Society of the District of Columbia—Dr. Thomas Miller, and Dr. William G. Young.

From the National Medical College—Dr. John C. Riley, and Dr. M. S. Lincoln.

From the University of Maryland—Dr. William E. A. Aikn.

From the Maryland College of Pharmacy—Alpheus P. Sharp.

From the United States Army—Dr. Lewis A. Edwards.

From the United States Navy—Dr. George Clymer.

The report of the Revising and Publishing Committee, appointed in 1850, was read and referred to the Committee on Auditing Accounts of the Secretary and Assistant Secretary.

It was, on motion,

Resolved, That such members of the two Houses of Congress as are medical graduates, be invited to attend the Convention, and participate in its deliberations.

The delegates of the several medical bodies represented in the Convention, were then called on for contributions towards a revision of the National Pharmacopœia, when reports were handed in from the Massachusetts Medical Society by Drs. Cutter and Bigelow; from the New York Academy of Medicine by Dr. Squibb; from the New York State Medical Society by the same; from the New York College of Pharmacy by William Hegeman, and from the Philadelphia College of Pharmacy by William Proctor, jr.

Mr. Parrish presented a report from the American Pharmaceutical Society, a body not incorporated and not represented in this Society; which was received.

These reports were referred to a committee with directions to report a plan for the revision and publication of the Pharmacopœia; the committee to consist of Dr. Franklin Bache, Mr. Edward Parrish, Alpheus P. Sharp, Dr. Thomas Miller, and George W. Russell, of Connecticut.

The Convention then adjourned.

SECOND DAY'S PROCEEDINGS.

The Convention met at 11 o'clock A. M. The minutes of the preceding meeting being read and accepted, the Committee on Credentials reported the following gentlemen as members:

From the Delaware State Medical Society—Dr. H. F. Askew.

From the Massachusetts College of Pharmacy—Messrs. Charles A. Carney, and R. R. Kent.

From the New York College of Pharmacy—Mr. Alexander Cushman.

The Committee on Revision made the following report:

"*Resolved*, That a Committee of Revision and Publication, consisting of nine members, of which the President of this Convention shall be one, be appointed—to which shall be

referred all communications in relation to the revision of the Pharmacopœia, and that three of the committee shall form a quorum.

"*Resolved*, That the Committee shall meet in the city of Philadelphia, and be convened as soon as possible, by the Chairman.

"*Resolved*, That the Committee shall be authorized to publish the work after its revision, and to take all other measures that may be necessary to carry out the intentions of this Convention.

"*Resolved*, That the Committee shall have power to fill its own vacancies.

"*Resolved*, That after the completion of its labors, the Committee shall transmit a report of its proceedings to the Secretary of this Convention, to be laid before the next Convention."

On motion of Dr. Miller, the vote was taken on each of the resolutions separately, and the whole report adopted.

Mr. Meakin moved that a Committee be appointed, to consist of one member from each delegation, to nominate a Committee of Revision.

This motion was amended by substituting "State and Territory," instead of delegation; and that the Army and Navy be also represented. It was then agreed to.

On motion, the thanks of the Convention were unanimously returned to Messrs. J. C. and H. A. Willard, for their kindness in allowing the use of their hall for the purposes of the meeting.

Dr. Askew read the report of the Committee on Nominations, which proposed

Dr. Franklin Bache, of Philadelphia;
Dr. E. R. Squibb, of New York;
Mr. C. T. Carney, of Massachusetts;
Dr. G. B. Wood, of Philadelphia;
Dr. H. T. Cummings, of Maine;
Mr. William Proctor, of Philadelphia;
Mr. Ira Carson, of "
Mr. A. B. Taylor, of "
Mr. W. S. Thompson, of Baltimore,

as the Committee on Revision and Publication of the Pharmacopœia. The report was accepted, and the nominations confirmed.

The Committee to make the necessary arrangements for holding the Convention in 1870, offered the following resolution:

"*Resolved*, That the same rules as adopted in 1850, for calling the present Convention, be taken, by simply changing the dates." Adopted.

Some discussion was then held upon the subject of a bill now before Congress, to provide for the greater security of the medical profession and the public, in the matter of the importation of drugs.

On motion of Dr. Bache the subject was laid on the table.

Mr. Meakin then offered the following resolution:

"*Resolved*, That in the index of the new Pharmacopœia, the syllables of both the Latin and English names be so divided and accented, that the index may also serve as a pronouncing vocabulary to the Materia Medica."

After some debate, Dr. Askew moved to refer the subject to the Committee on Revision and Publication, to be acted on at their discretion.

The resolution of Mr. Meakin was carried without amendment, by 12 yeas and 10 nays.

Mr. Meakin moved to change the title of the Convention from "The National Medical Convention, etc.," to the Pharmacopœia Convention.

Dr. Bache proposed to merely strike out the word *Medical*, which was carried unanimously.

On motion of Mr. Proctor, a contribution was then made by the members present, to defray the expenses of the Convention.

Mr. Proctor proposed having a low-priced edition of the Pharmacopœia published; which, after some debate, was left to the discretion of the Committee.

Mr. Parrish introduced the subject of weights and measures; which, after being debated by several gentlemen, was finally dropped, without any action being taken on it.

After a vote of thanks to the officers of the Convention, it adjourned *sine die*.

NOTE.—The delegates from the College of Physicians and Surgeons of Louisville, arrived too late to participate in the deliberations of the Convention.

THE LAW REGULATING THE SALE OF POISONS.

A few years ago the Legislature of Ohio passed an act regulating the sale of poisons, which requires the person selling to register the name, sex, age, and color, of the party purchasing, having a witness present, recording the ostensible purpose for which it is required; and also, coloring arsenic with soot, indigo, etc. Owing, in some measure, to the difficulty of determining what are and what are not poisons, this law has remained a dead letter on the statute books; and we believe that, although poisons are daily sold without, at least in a majority of instances, complying with the provisions of the act, not a single prosecution for its violation has taken place since its passage. As before observed, the great diffi-

culty appears to be in defining what are and what are not poisons; but that portion of the law which names and requires the coloring of arsenic, is certainly plain enough, and should be complied with. Although this law is so universally ignored, we very much fear that sooner or later some, and he, in all probability, the least offending and the least able to pay the penalty, will have to be the sufferer by it.

Since writing the above, we notice in our exchanges that the Legislature of New York at its recent session, also passed a law somewhat similar, but differing in two very important particulars. In the first place it names a class of poisons which may be sold, by registering, etc.; and another class which must not be sold without the prescription of a physician. Such a law as the New York one, would, in most of the Western States at least, be attended with so much trouble and difficulty, as to render it totally inoperative, unless it determined at the same time, who are and who are not physicians—as every man seems to have the right, and a great many claim it too, of styling themselves and being styled M.D.'s.

If druggists and apothecaries were to attempt to determine who are physicians, they would undertake to settle a question more vexed than any of those which have kept the politics of the country in such a high state of excitement for several years past, and are likely to do so for at least a few years to come. We annex a synopsis of the New York law:

"It requires persons who sell poisons, to register the names and residences of the party purchasing, unless the article is purchased on a physician's prescription. The vial or box containing the poison sold, must be properly and distinctly labeled. These provisions shall apply to the sale of small quantities of the following poisons: Arsenic and its various preparations, oxalic acid, corrosive sublimate, chloroform, sugar of lead, tartar emetic, opium and its preparations, oil of bitter almonds, cyanides of potassium, mercury, silver and zinc, deadly night shade, henbane, poison hemlock. No person shall sell or give the following poisonous substances without the written order of a regularly authorized practicing physician, whose name and residence shall be attached to such order, except in wholesale quantities, viz.: Prussic acid, aconite and its various preparations, atropia and its salts, cantharides, croton oil, datura and its salts, delphina and its salts, digitalis and its preparations, elaterium, ergot and its preparations, veratria and its salts, canabis indica and its preparations. The penalty for violation is $100 fine."

INFALLIBLE PHYSIC.

"There is always," observed an author two centuries ago, "some one arch quackery that carries the bell in England. If it is not tar water, it is something else." It is calculated that at least half a million of pounds sterling is expended annually by the English public on advertised drugs and nostrums. Upwards of forty thousand pounds are paid annually to the revenue for stamps on quack medicines. One patent medicine-vender, it is affirmed, spends no less a sum than twenty thousand pounds yearly in advertising his drugs.

One of the most notable impostors on public credulity, was St. John Long, a painter from Cork, who took up doctoring on his own authority. He settled in London, took a fine house, and enunciated a mystic doctrine about morbific matter. All his remedies were applied externally, kept strictly secret, and vaunted as the great discovery of the age. He soon got abundance of patients, and it is said gained one hundred thousand pounds out of the pockets of the credulous public in London. Yet Dr. Sleigh, the eminent physician to whom Long was induced to apply for instruction, after his first trial for manslaughter, asserted that, even for a layman and unprofessional man, he found him utterly and strangely ignorant on every thing whatever, however elementary, relating to the structure, functions, and diseases of the body. Nevertheless, at his two trials, numerous witnesses, among whom were noblemen, clergymen, and generals, stood forward to swear to his great medical knowledge. One of these witnesses (Lord Ingestre), swore that he saw St. John Long draw several pounds of liquid-like mercury from a patient's brain.

In the early part of the present century, a person called Perkins, sold in great numbers, and at exorbitant prices, two small tapering pieces of metal called Tractors, which were stated to be perfectly efficacious in the removal of "acute and chronic rheumatism, gout, sprains, erysipelas, epileptic fits, pleurisy," and numerous other ailments, and they were further alleged to be equally successful in all analagous diseases of horses or other animals. The small pieces of metal were made of zinc and copper, which would cost at the most but a few pence, yet they were sold in great numbers at six guineas a set, and persons of high repute and station bore testimony to the truth of this "safe, speedy, and effectual method of cure." In a pamphlet on the influence of the tractors, Perkins stated that "he had crossed the Atlantic and become a resident in London, that he might devote his time and attention to the diffusion of this important discovery, and its application to the miseries of mankind." He alleged that among his testimonials were vouchers from "eight professors in four univer-

sities in the various branches, as follows: three of natural philosophy, four of medicine, one of natural history; to these may be added nineteen physicians, seventeen surgeons, and twenty clergymen, of whom ten are doctors of divinity, and many others of equal respectability." Very soon, however, Dr. Haygarth and Mr. Smith in this country, and Schumacker in Germany, showed that they could produce equally marvelous effects with "false tractors" made of wax and wood, provided only that the patients did not know the deceit practised upon them, and had entire confidence in the method of cure employed. The paralytic were made to walk, rheumatic pains were put to flight, and, during the operation of pointing the false tractors to the part of the body affected, the pulse was visibly influenced. In one case they produced an increase of pain instead of relieving it, and the patient declared that after their use for four minutes, he was in more pain than when the surgeon took five pieces of bone from his leg, after a compound fracture in Wales, and his pulse was raised to one hundred and twenty beats a minute.

Contemporaneous with Perkins were the doctors, Brodum and Solomon. The former was footman to Dr. Bossy, a learned physician of those days, and having obtained some knowledge of medical terms, resolved to turn doctor himself. He brought out a "Nervous Cordial," and Botanical Syrup, which were announced to be grand restoratives of nature, and he secured patents for them. He published, also, a Guide to Old Age, with a portrait of the author, and puffed it so judiciously that, according to his own account, it went through fifty editions. After traveling about England, he at length determined to settle in the metropolis, "the Paradise of quacks," and, after a run of success, attempted to get himself an officer of volunteers, but eventually failed. Famous Dr. Solomon, in his youthful days, gained a livelihood by hawking black-ball in Newcastle. Regarding this employment as too menial, he turned his attention to cleansing ladies' faces from spots and freckles, by an "abstringent lotion." Afterwards he attempted to establish a newspaper in Liverpool, but not succeeding, tried to sell it, unestablished as it was. His great exploit was the fabrication of the Cordial Balm of Gilead, and the publication with it of a Guide to Health. In his Guide he informs the public, "that the most learned physicians have been unable to discover in the Cordial Balm of Gilead, the least particle of mercury, antimony, iron, or any other mineral except gold (pure virgin gold), and the Balm of Mecca." A portrait adorns this valuable medical work, and an engraving of the great man's house, with a scale of measurement.

The Balm of Gilead had a large sale, and seems to have

been a pleasant beverage. On one occasion a tradesman at Everton, near Liverpool, discovered, to his great regret, that his wife, though formerly modest and temperate, had suddenly become a dram-drinker. Enraged at her depravity, he interrogated her so sternly, that she confessed she had been allured to the pernicious habit by sipping the Balm of Gilead and other nostrums. She then produced the empty bottles which had contained these intoxicating cordials, and told her husband that three of her female neighbors had also been deluded into the same habit. The tradesman thereupon concerted a plan with the other injured husband to chastise the doctor. They decoyed him to Everton, on the pretense of attending a patient, and meeting him on the way, disguised as devils, with cow-hide and horns, dragged him into a field, and compelled him to swallow a whole bottle of his own nostrum. The doctor invoked Moses and all the prophets to deliver him from the demons; but they proceeded to toss him in a blanket, all the while filling the air with hisses and execrations. At length, permitted to return home, he was so convinced of the supernatural character of the punishment inflicted upon him for his impositions, that he advertised his premises to be let or sold.

On one occasion the British Parliament, carried away by the public enthusiasm for a secret remedy called Stephen's Specific, which was believed to be infallible in cases of gravel and stone, voted five thousand pounds for its purchase. The composition of Mrs. Stephen's remedy was thereafter officially published in the *London Gazette*, but the mixture of ingredients was so unexpectedly absurd that the publication was fatal to its reputation. "It consisted of egg-shells and snail-shells, with the snails in them, all calcined, ash-keys, hips and haws, swine-cress, and various other vegetables, all burned to a cinder, with camomile flowers, fennel, and some other vegetables—these last not being burned in the same manner." Dr. Hartley, the metaphysician, nevertheless, published an octavo volume in favor of Mrs. Stephen's specific, adducing one hundred and fifty cases in proof of its efficiency, his own being among the number. Dr. Hartley, however, died of the disease for which he believed Mrs. Stephen's specific to be an infallible remedy, and of which he believed himself to be cured.

However much we may be disposed to smile at the simplicity of our ancestors in giving credence to the vendors of secret remedies, it must not be forgotten that a whole host of them flourish in our own day, and draw annually large sums from the pockets of the public. They seem naturally to divide themselves into two classes: one offering to the world an

universal panacea for all diseases and all cases of disease; the other professing a speciality, or confining themselves to the treatment of special diseases.

Lady Mary Wortley Montagu remarked that the English are, more than any other nation, infatuated by the prospect of universal medicine, and after noticing the constant succession of cures applicable for all cases and circumstances, she says, in 1748: "I find that tar-water has succeeded to Ward's drops, and it is possible that some other form of quackery has by this time taken place of that." Although the nineteenth century has not the advantage of the Elixir of Life, or Bishop Berkley's tar water, or Perkin's tractors, still old age is guaranteed to all comers, through the efficacy of certain wonderful pills. By their agency longevity shall be the privilege of all who are wise enough to invest one shilling and three-halfpence from time to time. Our advertiser, with a laudable aspiration after science, enunciates a humoral pathology, specially his own; and as, according to him, all diseases originate in the blood, so the blood is only to be purified by perseverance in swallowing the Nos. 1 and 2 varieties of pills, the combined and judicious administration of which will produce immunity from all bodily ailments. Another professor discards every fanciful hypothesis. He entrenches himself behind countless cases of cure, and assuring the world that "the student of Nature knows how simple are her ways," recommends his pills and ointment as positive remedies for all external and internal complaints, asserting that by them "disease is conquered and art triumphant."

But by far the most agreeable advertisement which meets the eye is "no more pills, or any other medicine," fifty thousand cures of all manner of diseases, "without medicine, inconvenience, or expense," and effected solely by the use of some peculiar kind of food.

Preservation of Bodies for Anatomical Purposes.—Prof. Budge has found that bodies may be admirably preserved for a long period of time, whether for anatomical or for courses of operative surgery, by injecting into the carotid a preservative fluid composed of pyroligneous acid and sulphate of zinc, of each from eight to twelve drams to seven pounds of water. Bodies thus injected have kept during eight weeks of intense summer heat, without giving rise to any putrefactive smell, the muscles retaining their red color, and, though a little softened, admitting of good dissection. The injection does not prevent the subsequent injection of colored matters; and the knives used in dissection scarcely suffer at all.—*Virchow's Archiv.*

NEW PUBLICATIONS.

Clinical Lectures on Certain Acute Diseases. By Robert Bentley Todd. Philadelphia: Blanchard & Lea, 1860, p. 308.

Cotemporaneously with the reception of the above work from the publishers, came the announcement of the death of its distinguished author. He died on the 29th of January last, in his fifty-first year. His name was familiar in this country because of his work on Physiological Anatomy—Todd & Bowman's Physiological Anatomy; a work known and regarded as of the highest authority, wherever physiology is cultivated. He was the author of the "Cyclopedia of Anatomy and Physiology," and of other contributions to the profession.

With no ordinary avidity we seized this book for perusal. The mind of the author, we knew, was imbued with the spirit of physiology, which has made such remarkable progress within the last half century; and we were anxious to see how the subject of acute disease would be viewed by the light of such a mind. Besides the preface, it is made up of fourteen lectures, originally delivered in King's College Hospital, London. The first three treat "on Rheumatic Fever;" the next two "on Continued Fever"—Typhoid and Typhus; the sixth "on Erysipelas;" the seventh "on Erysipelas of the Fauces;" the eighth "on the Treatment of Acute Internal Inflammations;" the ninth "on Pyæmia;" the tenth, eleventh, twelfth, and thirteenth "on Pneumonia, and its complications;" and the last, the fourteenth, "on the Therapeutical Action of Alcohol." These lectures consist principally of the relation of cases, with short comments on them, giving the pathology, and the principles which guide the treatment.

The author, in his preface, says "the conclusions, which the clinical observations detailed in the lectures tend more or less to establish, may be summed up in the following propositions: First, that the notion so long prevalent in the schools, that acute disease can be prevented or cured by means which *depress* and *reduce* vital and nervous power, is altogether fallacious.

"Second, that acute disease is not curable by the direct influence of any form of drugs, or any known remedial agent,

excepting when it is capable of acting as an antidote, or of neutralizing a poison, on the presence of which in the system the disease may depend (*Materies Morbi*).

"Third, that disease is cured by natural processes, to promote which, in their full vigor, vital power must be upheld. Remedies, whether in the shape of drugs, which exercise a special physiological influence on the system, or in whatever form, are useful only as they may excite, assist, or promote those natural curative processes.

"Fourth, that it should be the aim of the physician (after he has sedulously studied the clinical history of a disease, and made himself master of its diagnosis,) to inquire minutely into the intimate nature of these curative processes—their physiology, so to speak; to discover the best means of assisting them, to search for antidotes to morbid poisons, and to ascertain the best and most convenient methods of upholding vital power."

Throughout the work, the argument of our author is to maintain that there is no such thing as sthenic disease; that in the most acute inflammation there is deficiency in vital and nervous power, and that the indication in the treatment of disease, is to uphold these powers. He argues that the cause of inflammation in any part arises from the presence of some morbific material at that part, derived from without or from the blood, and that the object in the use of medicinal agents, is to throw off from the system the morbid materials, and to sustain the vital and nervous forces during the process. Hence he repudiates, entirely, blood-letting, antimony, mercury, low diet, and all depressing means, and advocates the use of opium, acetated liquor of ammonia, and blisters as eliminants; and nutritious food, and alcoholic drinks as sustainers of vital and nervous power.

At page 169 he says: "These acute internal inflammations are very often—I suspect always—connected with the prominence of some peculiar diatheses—the gouty or rheumatic for instance—sometimes the scrofulous. Of these diatheses the main characteristic is the generation of some peculiar morbid matter which, when accumulating in this or that organ, gives rise to inflammation in it. The evil to be remedied by diminishing the intensity of the diathesis. This is done naturally,

and is to be imitated artificially by the elimination of the morbid element through the channels of augmented excretion, such as the sweat, the urine, and the secretions of the alimentary canal. Internal inflammations are cured, not by the ingesta administered, nor by the egesta promoted, by the drugs of the physician, but by a natural process as distinct and definite as that process itself of abnormal nutrition to which we give the name of inflammation. Our interference either may aid, promote, and even accelerate this natural tendency to get well; or it may seriously impair and retard, and even altogether stop that salutary process. If, then, this view of the nature of the means by which inflammation is resolved in internal organs be correct, it is not unreasonable to assume that a very depressed state of vital power is unfavorable to the healing process, for how can one important vital process go on satisfactorily where there is a lack of vital power? Indeed, if you watch those cases in which nothing at all has been done, or in which nothing has been done to lower the vital powers, you will find that the mere inflammatory process itself, especially in an organ so important as the lungs, depresses the strength of the patient each day more and more. * * * * p. 170. You will perceive then that according to these views, there are strong *a priori* reasons in favor of the policy of upholding our patient, even in the earliest stage of acute disease, by such food as may be best suited to their digestive organs such as is most readily assimilated, and caues the least effort, the smallest expenditure of vital force for its primary digestion. Nutritive matter in a state of solution—broths, soups, farinaceous matters—answer this purpose best, and alcohol which is directly absorbed without any previous change, and tends to feed the calorifacient process, and to diminish the waste of tissue, which would necessarily follow in order to maintain it. Many people start with horror at the notion of giving alcohol in acute inflammatory disease. What, give brandy in inflammation of the lungs! It is only adding fuel to the fire, and can not fail to keep up or to increase the morbid process. Those who reason in this way take a narrow and, I must say, an incorrect view both of the morbid process and the healing process; they are led away by the name *inflammation*, which is likened in their imagination to an internal

conflagration to be quenched by some summary means, or to be starved out. Nothing is to be given but what is in popular phrase cooling; and blood, the great pabulum of animal heat is especially to be diverted from the seat of inflammation, or to be abstracted in such ways as the peculiarities of the case will admit. This reasoning is of the most purely fanciful kind. It rests upon a very imperfect view of the phenomena, both local and constitutional, which accompany the inflammatory process. * * * The tendency of inflammation is to the more or less rapid formation of abnormal products, such as lymph and pus. * * * The more this process of inflammation draws upon the blood, the greater will be the exhaustion of vital force, and the more the frame will suffer; the more it feeds upon the tissues the greater will be the difficulty of the reparative process. Is it not then important that adequate supplies should be conveyed to this process, abnormal though it be? And in what other way can the appropriate supplies be conveyed to it than through the blood, so that the waste of tissue may be stopped, and the tendency to abnormal formations be checked, at least from that direction? And this truth seems to me but plain and simple fact; you must feed inflammation as you would any other active vital processes. You must, that is, feed them to prevent them from extending and preying upon healthy organic structures, and committing greater destruction. Bear in mind, too, that you can not stop an inflammation so long as the exciting cause is in the inflamed part; you can not cure an inflamed eye so long as the irritating particle of dust remains adherent to it. It is wise policy then to try and gain time, until by antidotal means, or by elimination you can get rid of the local irritation, whatever that may be."

We regret that space will not allow us to present to the reader, the views of our author in reference to the several diseases embraced in these fourteen lectures. Some of his pathological disquisitions, are, we might say brilliant, and such as only a profound physiologist and pathologist could give.

Dr. Todd is a remarkable man for the collection of isolated facts. His work on Physiological Anatomy evinces this, but we have never been an admirer or believer in his mode of reasoning; his deductions in that work many times appear

inconclusive. In like manner we are obliged to regard his reasoning—his deductions in reference to the inflammatory process and the proper mode of treating it. Have the observations of Hippocrates, Galen, Sydenham, John Hunter, Rush, and of thousands of others been at fault? Shall we from the reasonings, and the few clinical facts furnished in this book discard entirely the experience of our predecessors? Can it be that the proper method of treating acute inflammation is by active stimulants from the very beginning? The natural repugnance of the patients to rich food and strong simulants should be hint enough to interdict their being forced upon the sufferer. The instinct of the lower animals, when suffering from acute inflammation caused by severe injuries, guides them to refuse food, and their recoveries are quite as rapid as those of more "pampered man." But, indeed, the practice of our author, as laid down in his clinical observations of cases is not as bad as his theories, and it is against these latter that we protest. The conditions in which he actually gave stimulants were not such that the practitioners generally would object. Every body understands that conditions arise in severe inflammatory diseases, even in an early period of them, which require support; but it is not to be inferred from this that acute inflammations indicate the use of nutritious food, and alcoholic stimulants from the "very commencement." The dogma, that the existence of acute internal inflammation demands the abstraction of blood, and the use of saline purgatives, tartar emetic and calomel, is on the other hand, more dangerous than that which claims supporting treatment. There are certain internal inflammations, in which it appears to us there is no substitute known for blood-letting, unless it be found in the *veratrum viride*, which powerfully lessens arterial action, and effects, what our author desires—elimination.

In continued fever—typhoid and typhus—the reason for giving stimulants and supporting treatment is more plausible, and authority for their use is abundant, but our own experience, which has been considerable, is adverse to their employment. We can speak only of typhoid, for typhus is a disease which we have not seen. The author admits the distinction between typhoid and typhus. In the former of these affections according to him the natural duration is about twenty days,

and this agrees with what we think we have observed; but many cases continue for six and eight weeks, owing no doubt to accidental complications. If wine and brandy are given in the early part of the disease, the duration in every case that we have observed has been protracted unless cut short by a fatal termination; on the other hand if it is mildly treated, the great majority of the cases will terminate in convalescence at the end of the third week. Alcoholic stimulants can give at best only a temporary activity to the "vital and nervous" forces; they add nothing to the substantial support of the tissues; on the contrary, the activity of the vital and nervous forces, is kept up by them at the expense of the tissues, and the effect of their long continuance, especially in conditions where adequate food can not be assimilated, must be to hasten the disintegrating processes, promote emaciation and muscular debility.

We must refer to one other view of the author with which we can not agree—we allude to his explanation of the remedial powers of blisters. He asserts that the action of a blister when applied to a rheumatic joint, is to aid the eliminating process. The particular *materia morbi* of the blood which give rise to the rheumatic inflammation he believes to be lactic acid. Now does one suppose that lactic acid is removed from the system, in quantities sufficient to make any modification of rheumatic inflammation, in the small amount of serum thrown off by the blister? We do not doubt the efficacy of blisters in local inflammations, but the mode of action must, in our judgment, be explained on entirely different principles. We think blisters exert their beneficial influence by the stimulation imparted to the blood vessels of the inflamed part, causing them to contract, and consequently lessen the supply of blood. The principle of their action we believe is now generally understood. They were long ago explained by Martin Paine, and almost demonstrated by some recent experiments.

We repeat, that we regret that space will not permit a review of the several lectures contained in this book. Our readers will do well to peruse it entire. Although we can not agree with the leading idea of the book, yet it contains much sound doctrine, and many useful hints as to the management

of acute disease. To those who rely on bleeding, calomel, and tartar emetic as remedies for acute inflammation, we especially commend this book. It may save them from many a fatal blunder. W.

Clinical Lecture on Erysipelas, delivered at Mercy Hospital, by E. Andrews, M.D., *Surgeon of the Hospital, and Professor of Surgery in the Medical Department of Lind University.*

When learned men assume to treat "*de novo*" of a subject "imperfectly understood by the profession," and "wretchedly descanted upon even by our best text-books," and are "obliged to condemn some very common precepts of the best authors," we are justified in criticising the extent of their researches and claims to originality thus predicated. We are not of that laggard class who rest content with pathological or therapeutical knowledge as they now exist, and so we are ever ready to read by new lights and discuss new propositions solely upon their respective merits. The author says: "After a full consideration of the subject, I have adopted the following definition of this scourge of surgery: *Erysipelas is an inflammation, produced by the presence of a peculiar organic poison acting upon a system laboring under an aplastic diathesis.*"

So far, then, as the pathology of the disease is concerned, we have thus, in brief, the result of the "*de novo*" investigations, "after a full consideration of the subject" by Professor Andrews.

In this definition we have three postulates embraced—the existence of an inflammation, a poison, and an aplastic diathesis—and we can readily conceive of the mute astonishment with which their announcement was received by an electrified Chicago auditory.

There are, however, some knotty questions involved in such a description, and these our author has not seen fit to discuss, perhaps because he had not an appreciative audience. But this excuse is insufficient now that he has made his lecture public through an organ of medical reform, ycleped the Chicago Medical Examiner. He has not spoken of that period of incubation, during which we have developed a series of phenomena, constituting or not, erysipelas, dependent on individual views regarding the necessity of an outward manifesta-

tion, or eruption, for its production, but at any rate, so certain to develope that eruption, that we are able to diagnosticate the disease when it prevails in an epidemic form with almost absolute certainty. Has, then, the patient, during this time, erysipelas, or has he not? If not, then what has he? If so, then what is the organ inflamed, since inflammation is necessary to constitute the disease? But we will admit that it is not fair criticism to complain of what an author has *not* said, and so we will return to what he *has* said, and to his *manner* of saying it. He contends that "these three elements—the inflammation, the poison, and the aplastic diathesis—will constitute at all times an erysipelas; but if either one of them be absent, the case is not erysipelas, but something else! If the poison be absent, we have simply an inflammation with an aplastic effusion. If, on the other hand, the poison be present, but the aplastic diathesis be wanting, then the inflammation will be limited by plastic effusion, and will be a boil, a carbuncle, or some other circumscribed abscess." And again he says: "During several years experience as demonstrator of anatomy, I had formerly an opportunity to satisfy myself that poisoning by dissection wounds is in every instance an innoculation of erysipelas, and that it will only prove fatal when inserted into systems under an aplastic diathesis." We have not selected this sentence in order to comment upon the violation of grammatical rules, which it embraces, but because it contains a strange contradiction of the concluding proposition of the sentence before quoted. That this inoculation "will only prove fatal when inserted into systems under an aplastic diathesis," implies, of course, that the inoculation may be successful in other diatheses, in which it will not prove fatal, and hence it is not always "a boil, a carbuncle, or some other circumscribed abscess" that we have to anticipate as our author had before asserted. It is, however, to the "*de novo*" part of this lecture that we have exceptions to take, for a less charitable reviewer might deem that arrogance, which we, in our kindlier nature, deem but indiscretion.

In reference to this last paragraph, we would observe, that if it were not for the author's position, as well as his promised "*de novo*" investigations, we would suspect that he had read Nunneley's chapter on Diffuse Cellular Inflammation and mis-

taken his conclusions. This suspicion would be enhanced, by comparing his meager discussion of the existence of a poison with the very extended remarks and citation of cases of the same author, were it not that Nunneley on Erysipelas was published nearly twenty years ago. In regard to the terms plastic and aplastic diathesis, we would only remark that the "synochus and synocha," the "sthenia and asthenia," or the "strength and weakness" of Hunter, are terms expressive of conditions which have obtained under some name since the time of Adam, and our author's "aplastic" idea seems to be embodied in the remark of an obscure individual unsung to medical fame, called John Hunter, of whom, perhaps, the Professor never heard. Nevertheless, nearly seventy years ago, he said: "I suspect that the erysipelatous inflammation has very little of the adhesive in its nature"—this adhesive inflammation, remember, being an expression of his "strength." We would not weary the reader by quotations which might be made, to prove the folly of all claim to any thing "*de novo*," as regards his views of the pathology thus far evinced. We may be more successful when we examine his treatment, for in that he seems to have arrived at a millennial period: "What we have to do in this disease is chiefly comprehended under two heads. First, to antidote the poison; and secondly, to correct the aplastic diathesis, and I am happy to inform you, gentlemen, that the means of accomplishing both these ends are now discovered."

Iodine is the great antidote, but he very generously says of its application: "It is an old and favorite mode of treatment, and worthy of all commendation." The new point is, that he thinks it has not been used freely enough, and so orders "cotton batting, dipped in the tincture, to be wrapped around the whole arm, and confined by a piece of India rubber cloth to prevent evaporation." Well, he may be correct in this view, for Nunneley, before quoted, says: "The compound tincture of the Pharmacopœia is not strong enough. A saturated tincture in pure spirit should be made in the proportion of about forty grains of iodine to the ounce of spirit. This may be applied either pure or diluted, as may be borne, by means of a camel-hair pencil over the whole erysipelatous surface and the surrounding skin." Surely Dr. Andrews

would not use it stronger than this, or apply it more vigorously, than it "might be borne." But aside from the "*de novo*" aspect of this branch of the subject, the *modus operandi* of iodine thus applied is a matter of some interest. Does it act because it is antidotal to the poison? If so, why apply it externally when the external condition is a mere evidence of the existence of an internal poison? Why not introduce it internally, that it may be taken up by the absorbents more readily, and so the sooner meet the poison which it is to destroy, since "even the venom of serpents, when mixed with it, becomes harmless." We are not prepared to admit that this is the true theory of its mode of action, but rather incline to the belief that its action, thus applied, is local and mechanical. Next in order, we have the means by which the aplastic is changed to the plastic diathesis, and the perchloride of iron seems to be an astonishing remedy in the hands of the author. "With this remedy we have almost complete control over the diathesis. I have not time now to detail cases, but, gentlemen, I know what I assert when I say that, with this remedy a total change can be made in twenty-four hours, so that at the end of that time an erysipelas shall not be able to extend to any new tissues."

Of the muriated tincture, or watery solution (?), he gives twenty drops every hour, night and day. Dr. Andrews is certainly entitled to his opinion upon the effect of any remedy, and has a right to express that opinion—a right as undoubted as that which influenced Todd when he uttered this language: "Some attach great importance to the use of the tincture of sesquichloride of iron in this disease. I have no doubt many cases, such as those I have placed in my first group" (cases which get well without any thing), "will get well under that drug, partly and mainly because it excludes depressing treatment, partly, perhaps, from some tonic power in the medicine; but I would as soon think of trusting to it in the treatment of the third or fourth group" (serious cases) "of cases as I would to the billionth of a grain of aconite, or arnica, or sulphur, or any other homœopathic absurdity." The author concludes his remarks by guarding against the administration of ammonia as a stimulant. "The system is already breaking down into alkaline pus and serum, and every drop of ammonia adds to

the fatal excess of alkali which produces the morbid result." Very good authority might be cited to show that the secretions are acid in erysipelas, and ammonia is by many regarded an invaluable stimulant, but we have already wasted too much time on this document, and have only to offer for excuse, the pretensions under which it has been issued, and the source from which it emanated.

Editorial Department.

MEDICAL JOURNALISM.

Such as have not reveled in the easy luxuriance of an editorial chair, have much of the delectable in life to realize, and many of the pleasures arising from proofs of appreciated services to enjoy. The busy whirl of professional life, the intensity of its daily cares, the frequency of its vigils, ingratitude in the recipients of its blessings, the inadequacy of its pecuniary returns, and a thousand other annoying attendants upon its active pursuit, sink into a hushed oblivion, and in their stead appear the pleasing consciousness of services remunerated, grateful smiles of delighted readers, and the beneficent countenances of promptly paid publishers, as quietly in the still hours of night, your rapid pen records the thoughts which an anxious multitude of readers are to profit by. Such, doubtless, is the reasoning of those who do not desecrate the sacredness of our Elysium by intimations of our supposed mortality or necessities.

Thus argue those who do not deem us made of such rude stuff as dust and ashes. So they congratulate themselves, who do not care to pay the printer. But, kind reader, while you exact the performance of certain duties from us, and in a spirit of hypercriticism examine and decide upon their performance, remember that you also have duties to perform, and the first should be to pay the printer. If what you receive is not an equivalent for the picayune expenditure, then refuse to continue as a subscriber, first, however, having determined whether

the deficiency arises from your own imbecility or the incompetency of the editors. Such as are at all interested in our success will please manifest that interest, by paying what they owe. More, we do not require—less will be insufficient. On the 1st of July we hope to balance our books, and disprove the assertions of those who say that there is not energy or public spirit enough in the South-west to sustain a medical journal.

INDIANA STATE MEDICAL SOCIETY.

It was our good pleasure to be present at the last meeting of this honorable body, during a portion of its proceedings, and certainly if those whom we there saw are fair representatives of the profession of that State, we must heartily congratulate the inhabitants upon their good fortune, for never did we observe a better representation of intellect and intelligence in any place, or of any profession. We were not, however, entirely unprepared for such a demonstration, although we must confess to have been somewhat governed by curiosity in being there from what we had read on the other side of the question. We hope to be able hereafter to give our readers the benefit of some of the valuable reports offered there.

DEATH OF W. H. MERRITT, ESQ.

We have not yet reached the "sere and yellow leaf," or finished many more than half the days allotted to man, and yet we seem to be outliving the earliest and dearest associations of our life, and witnessing one after another of the friendly ties which bound us to the past ruthlessly snapped asunder.

The subject of this brief tribute was one of the noblest works of God. He was every inch a man. No loftier spirit ever went to judgment. No truer heart than his ever sent with every throb more spirited energies to intellectual man. In the spring-time vigor of his noble manhood, with wealth, position and family enchaining him to life, we see him stricken down without a moment's warning, and in a few hours afterward the record is written—he is dead! Dead? Aye, it is over such that death holds his gayest festivals, such are the ripest ears for his harvest, and the more who mourn the loss the greater the exultation. We may not measure the ways of

Divine Providence, or question the Infinite Wisdom which directs the affairs of life; and yet when such die, the heart impulsively rises in rebellion, and it is not in the natural man to say, "It is well," or to feel, "Thy will be done."

FERRO-CYANATE OF QUINIA.

We wonder why this invaluable preparation has fallen into such disuse. We have been accustomed to prescribe it for several years, and have never been disappointed in its effects. In cases wherein the sulphate could not be tolerated, or was otherwise contra-indicated, we have always resorted to the ferro-cyanate. Its effects are very similar to those of the sulphate, except that we have not ever known it to produce those cerebral troubles which so often attend the administration of the latter. Without entering at all upon the ecbolic properties of the sulphate, or discussing the question of its possessing such, we would hesitate to administer it in advanced pregnancy, but would not hesitate to administer the ferro-cyanate under similar circumstances.

AMERICAN MEDICAL ASSOCIATION.

We have not yet received the full report of the proceedings of this august body, but from what we have read of them, we infer that little practical good will result from the present meeting. The usual course of referring to never-to-be-reported-from committees, subjects which might possibly be debated with some acrimony, will doubtless again be pursued, and so matters of real and vital import will be hushed in the oblivious archives of sections or sub-committees. The President retired with just anathemas against abortionists, and laudable pæans to peace and good will among men. The Committee on Medical Education have reported a series of impracticable requirements which effectually destroy all hope of reform. Their position is so radical that we cannot resist the power of a lurking suspicion as to their object in introducing them. We sincerely hoped for a reformation, but this report leaves us for the present without hope. Dr. Ely Ives was elected President. The next meeting will be held in Chicago, Illinois.

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